DOCUMENT RESUME

ED 069 369 PS 006 051

| | |
|---|---|
| AUTHOR | Fowlie, E. H.; And Others |
| TITLE | Report of the Minister's Committee on Kindergarten Education: Final Report. |
| INSTITUTION | Saskatchewan Dept. of Education, Regina. |
| PUB DATE | 30 Jun 72 |
| NOTE | 103p. |
| EDRS PRICE | MF-$0.65 HC-$6.58 |
| DESCRIPTORS | *Early Childhood Education; Financial Support; *Kindergarten; Kindergarten Children; *Parent Participation; *Public Support; Research; Surveys; Technical Reports |
| IDENTIFIERS | Canada; Ministers Committee on Kindergarten Education; Saskatchewan |

ABSTRACT

Investigation of publicly supported kindergartens in Saskatchewan, Canada is reported. The Minister's Committee on Kindergarten Education held 12 meetings, received 140 briefs and attended 21 hearings in centers throughout the Province. In response to the investigation, the committee concluded that the time is right to implement publicly-supported kindergartens in Saskatchewan. Although implementation will not be easy in many school systems, interest of numerous groups in early childhood education, concern of parents, and recognized importance of early learning experience provide justification. Thirty seven recommendations design the implementation of such a program. The recommendations would phase in the program. (DJ)

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED 069369

PROVINCE OF SASKATCHEWAN

# REPORT OF
# THE MINISTER'S COMMITTEE
# ON KINDERGARTEN EDUCATION

PS 006051

FILMED FROM BEST AVAILABLE COPY

*Province of* *Saskatchewan*

*DEPARTMENT OF EDUCATION*

SUPERVISORY SERVICES BRANCH

AVORD TOWER, REGINA

MINISTER'S COMMITTEE ON KINDERGARTEN EDUCATION


Chairman
Mr. E. H. Fowlie,
Director, Supervisory Services,
Department of Education,
Avord Tower,
Regina, Saskatchewan.

Secretary
Mrs. Audrey Sojonky,
Director, Research, Planning & Development,
Department of Education,
Avord Tower,
Regina, Saskatchewan.


Regina, Saskatchewan,
June 30, 1972.

To the Honourable G. MacMurchy,
Minister of Education.

Sir:

Herewith I submit the final report of the Minister's Committee on Kindergarten Education which on your order was established on October 13, 1971.

Members of the Committee have asked me to thank you for the privilege to serve on this Committee and for the opportunity to advise you on ways to implement kindergartens in Saskatchewan. We hope our recommendations will provide you and your Department with helpful guide lines for the introduction of a universal kindergarten program in Saskatchewan schools.

Respectfully submitted,

E. H. Fowlie,
Chairman.

TERMS OF REFERENCE

1. To examine the need, feasibility and desirability of a province-wide, publicly-supported kindergarten program.

2. To recommend suitable objectives for such a program.

3. To recommend appropriate means of achieving and implementing these objectives.

In discharging its responsibilities, the Committee is specifically requested:

(a) to define a role for kindergarten in Saskatchewan's education system;

(b) to identify alternative means of financing and to provide accurate estimates of annual capital, operating and conveyance costs of a kindergarten program;

(c) to consider an appropriate admission policy;

(d) to identify problems that may be associated with implementation;

(e) to identify changes in legislation which may be required.

In addition to conducting a review of research and literature, the Committee may find it advisable to call for briefs and other representations from interested parties in the province. Hearings may be held in regional centres for this purpose.

MEMBERS OF THE

MINISTER'S COMMITTEE ON KINDERGARTEN EDUCATION

MR. E. H. FOWLIE (Chairman)

MRS. AUDREY SOJONKY (Secretary)

MR. J. A. BURNETT

DR. A. KRATZMANN

DR. H. LANGLOIS

DR. T. R. MCKAGUE

MRS. MARION READ

MRS. MAVIS WILLIAMS

MISS MARJORIE BENSON (Research Assistant)

DR. A. J. Y. GUY (Special Consultant)

TABLE OF CONTENTS


| | Page |
|---|---|
| Terms of Reference | v |
| Members of the Committee | vii |
| Foreword | xiii |
| Chapter 1 - INTRODUCTION | 1 |
| Chapter 2 - PROGRAM OBJECTIVES | 3 |
| Kindergarten Objectives and Program Implications | 3 |
| Integration with Division I | 6 |
| Local Autonomy and Parental Involvement | 8 |
| Chapter 3 - REVIEW OF THE LITERATURE | 10 |
| Value of Kindergarten | 10 |
| Kindergarten and School Achievement | 11 |
| Kindergarten and the Development of Intellectual Ability | 12 |
| Social and Personality Development Through Kindergarten | 13 |
| Kindergarten and Physical Development | 13 |
| The Value of Kindergarten for Disadvantaged Children | 13 |
| Kindergarten and the Early Detection of Learning Disabilities | 14 |
| Approaches to Pre-School Education | 15 |
| Related Issues | 17 |
| Conclusion | 18 |

Chapter 4 - RESULTS OF BRIEFS AND PUBLIC HEARINGS..... 19

Desirability of Publicly-Supported Kindergartens..... 20

Purposes of Kindergarten Programs..... 22

Teacher Qualifications and Training..... 23

Other Considerations..... 24

Chapter 5 - IMPLEMENTATION..... 26

Teacher Qualification, Training and Certification..... 26

Curriculum Development..... 28

Consultative Services..... 29

Special Education..... 29

Pre-Kindergarten Programs in Early Childhood Education..... 31

Research..... 31

Local Decision-Making..... 32

Phasing-In Kindergarten Programs..... 33

Attendance at Kindergarten..... 33

Length of Day and Length of Term..... 35

Kindergarten Class Size..... 36

Classroom Facilities and Equipment..... 37

Pupil Transportation..... 38

Kindergarten in Rural Areas..... 39

Financing Publicly-Supported Kindergartens..... 40

Alternative Kindergartens..... 42

Support for Private Kindergartens..... 43

Pilot Projects..... 43

Chapter 6 - Analysis of Costs..... 46

Demographic Analysis of Sample Jurisdictions..... 47

Future Provincial Enrolment Projections..... 47

Capital Building and Equipment Costs - Sample Jurisdictions..... 49

Program Establishment Costs - Sample Jurisdictions..... 50

Annual Operational Costs..... 52

In-School Operational Costs - Sample Jurisdictions..... 53

Transportation Costs - Sample School Units..... 55

Total Operational Costs by Year - Sample School Units..... 56

Projected Provincial Operational Costs..... 57

In-School Operational Costs..... 57

Total Operational Costs..... 60

Summary of Major Findings..... 64

Recommendation..... 66

Chapter 7 - CONCLUSION..... 67

Chapter 8 - SUMMARY OF RECOMMENDATIONS..... 68

Appendix A - REFERENCES PERTAINING TO THE LITERATURE..... 73

Appendix B - LIST OF INDIVIDUALS AND ORGANIZATIONS WHO SUBMITTED BRIEFS TO THE COMMITTEE..... 79

Appendix C - A PROPOSAL FOR BURSARIES, SCHOLARSHIPS AND IN-SERVICE TRAINING PROGRAMS..... 84

Appendix D - CLASSROOM MODES REVIEWED BY THE COMMITTEE..... 86

Appendix E - RECOMMENDED EQUIPMENT FOR KINDERGARTEN CLASSROOMS..... 90

Appendix F - SURVEY OF PRIVATE KINDERGARTENTS IN SASKATCHEWAN..... 93

FOREWORD

This report is the culmination of the work of a Committee established by the Minister of Education to investigate the issue of publicly-supported kindergartens in Saskatchewan. The Committee was composed of eight individuals representing various backgrounds, viewpoints and prior experiences concerning early childhood education.

Beginning their activities on October 25, 1971, the Committee held twelve meetings, received 140 briefs and attended twenty-one hearings in centres throughout the province. The Committee was very much a working Committee, with all members contributing directly to the preparation of the Report.

It is difficult in a brief space to give proper acknowledgement to the many people whose time and knowledge have gone into the preparation of this Report. Special thanks, however, are due to Dr. A. J. Y. Guy, Associate Professor of Education, Faculty of Education, University of Saskatchewan, Regina Campus, for his contribution through the major cost study undertaken for the Committee.

Special thanks are also expressed to Dr. Myer Horowitz and Dr. Mildred Roebeck for the opportunity to consult with them during their visit to the University of Saskatchewan, Regina Campus, as guest lecturers for a seminar. As well, reference must be made to the clerical staff of the Research, Planning and Development Branch, Department of Education, whose efforts throughout the entire period of the Committee's activities are most gratefully acknowledged.

Cover drawing by kindergarten pupil, McLeod School, Regina, Saskatchewan.

Chapter 1

# INTRODUCTION

The experiences during the early years of a child's life are crucial in determining his attitude toward learning and his ability to deal with subsequent experiences in school and in life.

The Minister's Committee on Kindergarten Education has based its report on an acceptance of this premise. We believe that children of kindergarten age should have access to a learning program based on individual and group needs; a program intended to stimulate their interests, to expand their abilities and to maximize their potential.

The term openness best describes our concept of what a kindergarten program should be like. In a setting designed with the interest of children in mind, teachers and pupils can work together in an atmosphere of trust and mutual respect.

Through a variety of activities weighted toward positive outcomes children should develop a self-concept which enables them to become eager learners, to profit by subsequent opportunities and to develop into happy and resourceful individuals.

Based on the premise that play is a child's work, kindergartens can create a situation where learning is informal and results from many casual experiences, rather than being imposed by adult authority. In the varied environment of the kindergarten classroom, children are not forced to learn or required to sit still; they are not pressured to read or encouraged to compete. Rather, they are free to pursue their own interests and share their discoveries, unencumbered by a fear of failure or feelings of inadequacy.

If the attributes which characterize this kind of program can find their way into the more structured environment of the grades,

the entire system can be reformed and enlivened. It can become more responsive to children and their needs by devising newer ways to make the experience of going to school more meaningful and more humane.

It is because of our belief in the importance of early learning experiences and our hope that the ideals of a sound kindergarten program may permeate the entire education system that the Committee strongly recommends:

1. THAT PUBLICLY-SUPPORTED KINDERGARTENS BE ESTABLISHED IN SASKATCHEWAN.

Chapter 2

# PROGRAM OBJECTIVES

## Kindergarten Objectives and Program Implications

We consider that the major objectives of kindergarten education should be the promotion of self-actualization, socialization and a commitment to learning. Through a variety of activities carried out individually and with others, the kindergarten child begins to develop an awareness of his abilities and shortcomings and an appreciation of the means available for him to grow toward self-actualization. In addition he should also acquire an awareness of other's needs and the ways by which he can assist in meeting those needs. As a result of a healthy, secure self, together with a comfortable dependence on others, the child will develop confidence in himself which can then be directed toward involvement in the deeper aspects of learning.

Interdependence of function is implicit in the objectives of a kindergarten program. Because the activities intended to develop one aspect of a child's personality will affect all other parts, these activities must be integrated into a meaningful whole. Rather than segmenting the child's learnings, educators of young children should concern themselves with the relatedness of all learning endeavours.

At this age the acquisition of a positive self-concept is particularly important. It is only through the development of a healthy self-concept that the child learns independence and persistence, becomes more sensitive to the needs of others, increases his competence in dealing with his emotions, begins to trust his achievement possibilities and develops aesthetic awareness.

On the basis of a positive self-concept, the child is better able to develop cognitively. He is freed by his confidence in his

ability to attend to the basic elements of cognition: concept formation, problem solving, critical thinking and the development of language. Through increased competency in communications and social relationships, the varied components of speaking, listening, reading and writing are developed. Specific attention is focused on visual and auditory reception, and verbal and manual expression.

Since the elements of cognition and the components of language formation can influence a child's self-concept, their development should be considered as prime objectives in the kindergarten program.

Increased competency in perceptual and motor skills is a related objective. Through the development of gross physical co-ordination, the child becomes aware of the capabilities of his body and the limitations imposed by his environment. Attention is also focused on fine muscle co-ordination and the discrimination of the senses.

In kindergarten the child begins to learn self-reliance and initiative, the ability to give and follow directions, to judge and control his impulses and to cope with failure. All of these factors aid in his social development as a pupil and as a person. Each child's world of experiences, people and things is extended in breadth and depth, spanning all subject areas according to his needs and interests.

The kindergarten program, then, utilizes all disciplines and learning activities in order to develop a child's positive self-concept and free him to explore cognitive, motor and affective domains, while developing in him the characteristics of an independent learner and a responsible individual.

In order that these objectives can best be realized, the following features should be incorporated into the kindergarten program:

The teacher of kindergarten children must possess a positive

attitude of trust, respect and acceptance of each child and an appreciation for his total development, thus creating a receptive and supportive environment for learning. The teacher is at once an observer, a resource person, a stimulator and a reinforcer. He assists each child to develop a feeling of confidence and self-worth by observing his interests and encouraging his creative endeavours. At the same time he structures situations in such a way that the child recognizes the limitations of his behaviour and is prepared to accept the consequences of his actions.

It is considered necessary that materials and equipment to be used in the kindergarten program should provide multi-level and multi-content experiences in order to stimulate each child in a variety of ways to explore his environment and to master basic skills. The program should provide for concrete, multi-sensory, first-hand experiences intended to promote exploration and active participation; rich play situations designed to enhance social and language skills; a focus on the process rather than the product of learning; and extensive child-created equipment.

Basic to the kindergarten program is a commitment to individualization. Such individualization is facilitated by flexibility in the physical environment, the structure and content of the program and the size of the group. There should be greater emphasis on the selection of activities and materials by pupils than on teacher instructed lessons. Ample provision should be made for independent inquiry and freedom to innovate, with involvement of the whole child in the process. In addition, opportunity should be provided for the diagnosis and treatment of individual learning and personality disorders.

Integration of learning modes and content is another implication

of the objectives of the kindergarten program. Such integration allows for the possibility of pupil interaction with others within and outside the classroom. In order to create a total learning environment, parents and community resources should be fully utilized. The ability of the teacher to draw together all related components of a situation is essential to integrated learning.

Program integration necessitates the use of the five most effective modes of learning for the kindergarten child: play, games, sensory education, concrete manipulation and physical participation. The use of cognitive, motor and social skills should be brought into play in order to create a total learning environment.

Finally, these program objectives require a commitment to language communication. To facilitate this, social situations must be created which provide children with the opportunity to employ group dynamics and problem-solving skills, to express themselves creatively and to involve themselves in life-like situations. Included in these activities would be discussion, dramatization, the recording of stories and experiences, role-playing, music appreciation and artistic pursuits.

Through the kinds of activities suggested here, the kindergarten program can provide a unique and meaningful set of experiences for pre-school children.

Integration with Division I

Although integration of the kindergarten program with later school experiences is necessary to ensure continuity and promote readiness for subsequent learning, it is generally agreed that kindergarten should not be considered as a downward extension of Division I. Rather, integration between kindergarten and the first year of school should be a natural

reflection of attempts to meet the needs of children at both levels. If all programs are based on the needs of children and are sufficiently individualized to ensure continuous progress, then articulation between them should be ensured.

It is unrealistic to dictate that the emphasis of the kindergarten program should be any one of cognitive development, skill development or social adjustment. This will depend on the nature of the youngsters in the class and the ability of the teacher to individualize the program. For an only child from an isolated background, the opportunity to relate to other children may be the most important contribution of the kindergarten program; but for a youngster from an advantaged home who has been exposed to nursery school experience, a more cognitively oriented program may be most desirable.

The question of the appropriate relationship between kindergarten and Year 1 is complicated to some extent by the following factors: Some Year 1 programs are highly structured in their approach, with great emphasis being placed on the development of reading and language skills. Other programs are similar in nature to an ideal kindergarten situation, with relatively little pressure on the pupil to succeed academically. In addition, some parents consider that the major value of kindergarten is the preparation of children for structured learning experiences, while other parents are reluctant to expose their children to formalized schooling too early.

What appears to be important is that kindergartens avoid the extremes of providing either a totally play-oriented, socialization experience or a highly cognitive, academic-type program. Although both emphases may be necessary for certain youngsters, a balance of activities would seem to be most appropriate for the majority of

children.

Local Autonomy and Parental Involvement

One of the principles which the Committee acknowledged was that as many decisions as possible with respect to the implementation of kindergartens be made at the local level. As a Committee, we are convinced of the value of kindergarten, we respect the right of school boards with fiscal responsibility to decide whether or not they wish to implement the program.

For this reason, the Committee recommends:

2. THAT THE DECISION TO ESTABLISH KINDERGARTEN IN ANY SCHOOL JURISDICTION BE A SCHOOL BOARD DECISION, RATHER THAN A PROVINCIAL ONE.

If a board decides to establish kindergarten in its jurisdiction, within the framework of broad provincial guidelines, it should also be free to determine the kind of facilities it will use, the teachers it will employ, the type of transportation it will provide and the format for the program it will undertake.

In order to ensure that kindergarten programs are of a high quality, the provincial government should establish guidelines with respect to such things as the minimum number of days per year the program will operate, the nature of the facilities and the qualifications of teachers. Beyond this, however, the major concerns of the provincial government should be in providing financial assistance to local jurisdictions, facilitating the establishment of appropriate teacher training programs, developing curriculum resources, providing consultative services and encouraging boards to carry out the finest type of program that is possible.

It is anticipated that, having been granted a considerable degree of autonomy regarding the nature and format of kindergarten programs, school boards will make every effort to ascertain and act upon the views of their local community. Only in this way can kindergarten programs adequately reflect the expectations and aspirations of those most affected by them.

In this regard, recognition should be given to the special role that parents play in the education of kindergarten children. It would be unfortunate if the interest that parents have shown in the education of their pre-school children were lost as a result of kindergarten jurisdiction being assumed by school boards. For this reason, provision should be made at the local level for parents to become involved with the kindergarten program in an advisory capacity to the board and through close contact with the kindergarten teacher.

Chapter 3

# REVIEW OF THE LITERATURE

Literature in the field of kindergarten education, which is already extensive, is becoming increasingly abundant as more educators become involved in this area of education. Topics ranging from the history and philosophy of early childhood education to the effects of class size on kindergarten programs are dealt with in such varied publications as scholarly journals and popular magazines. The literature includes discussions regarding the effects of pre-school learning on subsequent school achievement, the importance of the early years for cognitive development, the value of kindergarten programs for disadvantaged children and the significance of early detection of learning disabilities.

This summary of the literature is not intended to be exhaustive; rather it is intended to bring into sharper focus some of the major issues dominating the literature on kindergarten education.[1]

## Value of Kindergarten

Conclusions regarding the general value of kindergarten range from statements that research strongly supports the widespread concern being expressed for the adoption of kindergarten (53) to challenges that there is insubstantial evidence to document the effectiveness of early school experiences. Although research is far from conclusive, it indicates that a quality kindergarten program favorably influences later academic achievement, safeguards health, fosters social development, has desirable effects on personality growth and increases opportunities to one and a half years - an eight month period which so far has no name (61).

---

[1]The numbers in the text which follows indicate the reference source(s) listed in Appendix A.

Perhaps the most forthright summation of this issue has been made by Sheperd, who states:

> "The critical role of early experiences in the total development (cognitive, social-emotional, and physical) of the young child no longer needs to be documented. We no longer need to ask the question, "Does early education produce positive effects?" The answer has been given to us by such investigators as: Hunt (1961), Bloom (1964), Skeels (1966), Kirk (1958), Weikart (1967), Gray and Klaus (1968), Caldwell and Richmond (1968), Bereiter and Englemann (1966), Nimnicht and Meier (1969), Karnes (1969) and many others. It has been clearly shown that incalculable gains can indeed accrue to the young child and thereby to the entire community by the early and judicious use of appropriate intervention strategies. Today's composite question must be, "Which intervention techniques are best employed with which children, at what point of time, and under what kinds of situations?" (70)

Kindergarten Education and School Achievement

Research evidence regarding the subsequent school achievement of children attending kindergarten is somewhat inconclusive. There are many studies, including Canadian ones (10, 26, 59, 69, 85), which indicate that academic achievement was enhanced by pre-school education (14, 20, 49, 68, 81). In other instances, however, it has been discovered that significant differences in academic performance have not been found between those who attended kindergarten and those who did not (58, 63, 66, 67, 80). No study has reported that kindergarten has had a negative effect on later school achievement (85).

A number of research studies have concluded that any academic advantage obtained by kindergarten attendance seems to dissipate by the time the child reaches the third or fourth grade (17, 71, 81, 83). One author suggests that this "leveling off" effect might be the result of the similar elementary school experiences provided all students, whether they attended kindergarten or not (85).

Because of similar expectations for all students, the school imposes a kind of ceiling on the achievement of all youngsters.

Some people tend to be skeptical about placing too much faith in the greater achievement commonly demonstrated by kindergarten pupils claiming that these children are predominantly middle-class, and that the achievement may be a result of such non-school factors as family attitudes and expectations (56). Others claim that with universal early childhood education almost every child would have a higher starting point in knowledge and developed ability (56).

Commenting on the effects of pre-school education, Fowler states that "In no instance have I found any individual of high ability who did not experience intensive early stimulation as a central component of his development" (28).

Kindergarten and the Development of Intellectual Ability

There is considerable evidence that pre-school experiences in kindergartens and nursery schools can have a positive effect on the development of intellectual ability (9, 24, 56, 75). Such development, it has been found, follows an orderly, sequential pattern (40, 42). If higher level mental processes are imposed without an adequate base of lower order skills, they are not accommodated by the learner and may go "out of phase" when he is under pressure (43).

With respect to academic achievement in such areas as reading, language and mathematics, the findings are generally positive or inconclusive (14, 50, 53, 75). Kindergarten attendance either enhances or has no appreciable effect on later achievement. Again, there is almost no evidence of deleterious consequences that can be traced to early learning (28), except in a few situations where the teaching of

reading appears to have preceded the pupil's readiness to read (53).

## Social and Personality Development Through Kindergarten

Although the major concern of those writing about the effects of early childhood education has been intellectual development and subsequent school achievement, many researchers have investigated questions related to social adjustment, home to school transition and emotional development. Possibly because of its complexities of definition and measurement (85), the issue of the value of pre-school education on social and emotional growth has not been conclusively documented. Many studies (4, 31, 53, 77) seem to indicate that the association of young children with their peer group in a stimulating environment under the guidance of a capable teacher results in valuable social and emotional increments for the kindergarten child (53).

## Kindergarten and Physical Development

Despite the fact that many kindergarten experiences focus on the physical activities of five year olds, limited attention has been given to research studies of physical development. Worth talks of the increasing importance of physical growth as an aspect of early childhood education, particularly as it relates to motor development, visual development, auditory growth, kinesthetic development, speech defects, brain damage and sex differences (85). Many of those concerned with the establishment of kindergarten refer to the benefits of earlier detection on physical impairments and their correction.

## The Value of Kindergarten for Disadvantaged Children

No other issue has sparked as much interest in kindergartens as that of the ability of early childhood programs to compensate for

the cultural deprivations of pre-school youngsters. As a result of extensive work in this area, it has been concluded that adequately designed kindergartens can help children who are culturally and intellectually deprived to raise their intelligence and achievement levels.

By far the largest project concerned with the culturally disadvantaged has been Operation Head Start in the United States. It began as a short term kindergarten program intended to make up deficiencies in the environment of disadvantaged children so that they could begin school on the same level as their middle class peers. Since then, Head Start has grown to include full-year programs for pre-school children age three and over. By 1970 the project had served almost four million children in all fifty states.

While there are some conflicting reports, the bulk of available data indicates that Project Head Start and other early intervention programs show positive results, largely in children's achievement and general ability level (21, 36, 45). However, the impact of this type of program seems to decrease or disappear as children go through the early grades in elementary school (45). One of the most commonly stated explanations for this is that the public schools are at fault because of large classes, low expectations and incongruent philosophies (21). Goldschmid concludes that:

> "there can be little doubt that well-structured programs are effective in producing significant, sometimes dramatic, improvements in the intellectual abilities of pre-school children, particularly those from an impoverished environment which lacks meaningful stimulation" (35).

This view is clearly shared by other writers (3, 21, 30, 36, 57, 84).

Kindergartens and the Early Detection of Learning Disabilities

Few would question that early detection, combined with preventive

measures, is a more satisfactory solution to learning problems than is remediation attempted at a later stage. Equally obvious is the fact that kindergartens provide one additional year for early detection and correction measures. There is an abundance of literature to support the importance of early diagnosis of learning problems, with the CELDIC Report documenting the number of children who require this kind of assistance (19). If one-eighth of all Canadian school age children require special care and treatment because of emotional and learning disorders (19), the potential for early assistance is tremendous. Such detection and treatment can result in large gains, whether they be physical, intellectual, social or emotional (7, 18, 22, 51, 52, 72), depending on the abilities of teachers and others to detect and diagnose such problems and to initiate appropriate treatment.

Approaches to Pre-School Education

From the time of Froebel, there has been an interest in various approaches to early childhood education. Historically, the names of Montessori and Piaget stand out because of their contributions to the nature of pre-school programs. More recently, there has been a growing debate between those who advocate an approach to kindergarten based on enrichment, creativity and freedom, and those who contend that a more cognitively structured experience for pre-school children is desirable.

What has come to be called the enrichment approach was the basic rationale for pre-school education throughout most of the twentieth century until it was questioned during the 1960's. Based on the tenets that young children should not be intellectually pressured, and that the development of the whole child and adjustment to the

peer group were desirable, it emphasized social adjustment through a free approach, combined with creative activities.

Disenchantment with enrichment resulted from a number of factors, including the contention by educational psychologists that the traditional nursery school was permitting children to mark time instead of stimulating their intellectual and academic interests; the growing concern for disadvantaged children who lacked the cognitive skills needed to benefit fully from schooling; and increasing pressure from parents and school systems for more instruction at the pre-school level.

As a result of these factors a more instruction-oriented approach to pre-school education has gained in popularity. This approach stresses cognitive development through structured and sequential learning activities. It is receiving a great deal of attention today, partly because it is ostensibly based on the findings and opinions of respected psychologists, partly because it seems appropriate for the education of disadvantaged children, and partly because some of the programs reflecting the instructional approach have been rather controversial.

Paramount among these has been the approach to early childhood education as practised by Bereiter and Engelmann. This method utilizes high speed cognitive learning, development of basic language skills, small group instruction and a system of drills and rewards. Although this "pressure cooker" approach to kindergarten education has not gained in popularity, it has forced people to look more closely at the cognitive aspects of early childhood education and the ways by which instruction can be enhanced.

A great deal of attention is presently being focused on the type of program found in the infant schools in Great Britain and its applicability to all levels of education in North America.

## Related Issues

In this final section, a number of other issues related to kindergarten education will be discussed.

Conclusive evidence on the effect of class size has been difficult to find for any age group. One research study investigating class size in kindergartens found that there were more aggressive acts in a large class than in a small one; that the teacher was able to offer more individual guidance in the smaller class; and that more creativity was evidenced there (16). A second researcher found that decreasing class sizes led to increased face-to-face communication between teacher and pupils; greater opportunity for children to select learning materials; increased knowledge by teachers of their pupils' individual abilities; and increased attention to grouping (64). For five year olds, a maximum of twenty children is recommended for a kindergarten program (5).

There are conflicting opinions regarding the age of entrance into kindergarten. Research on this question seems to indicate that those children who enter at an age lower than the normal age for five year olds do not achieve as well or adjust as adequately as do the regular starters (53).

The relationship between the home and the kindergarten has received some attention on the part of writers, particularly as it relates to possible alienation between parents and their children. It appears that, where there is a well designed and operated kindergarten program, no alienation of child and parent takes place (13). The most effective safeguard against family disintegration appears to be direct parental involvement in the kindergarten program. The inclusion of parents gives support to the child who is entering a

new experience and also helps parents to adapt to the child's becoming part of a system other than the family unit (44).

Conclusion

Literature in the field of early childhood education is increasingly abundant and accessible, constituting a wealth of information which can be applied to the implementation of kindergarten programs. In many instances, research tends to raise more questions than it answers, with the result that its utility in resolving major issues is limited. Nevertheless, it can serve to make people aware of the trends in early childhood education, to realize the limitations of the potential of pre-school programs, and to make more informed decisions about the future of kindergarten education.

Chapter 4

## RESULTS OF BRIEFS AND PUBLIC HEARINGS

In order to ascertain the views of the public regarding the feasibility and desirability of publicly-supported kindergartens, the Committee arranged for a series of hearings which were held at 21 centres throughout the province during January of 1972. Prior to the hearings, all interested persons and organizations were invited to submit briefs to the Committee, indicating their views on kindergarten education, and to attend a meeting in their area. As a result, more than 140 briefs were received, most of them being precirculated to the Committee before the meeting at which they were to be considered. The Committee wishes to express its appreciation to the individuals and organizations who submitted briefs.[1]

The diversity of the briefs was extensive. They ranged from handwritten letters expressing a single concern to carefully worded documents dealing with a variety of issues. Some of the briefs reflected the views of organizational members determined by surveys and questionnaires, while others represented statements of policy which had previously been established. Collectively they encompassed the views of provincial organizations, community groups and interested individuals on all matters related to kindergarten education.

All the hearings were attended by at least two members of the Committee, with those in Saskatoon and Regina including the entire Committee. Although the format for the hearings was flexible, the meetings usually included a summary of written briefs followed by

---

[1] A list of individuals and organizations who submitted briefs to the Committee is included in Appendix B.

questions, verbal presentations and general discussion. In most instances details of the discussion were recorded by the local superintendent, who subsequently submitted an account of the proceedings. The average number attending the hearings was thirty.

Participation in the public hearings probably represented the highlight of the activities of the Kindergarten Committee. The hearings documented both the amount of interest there was in the province regarding kindergarten education and the degree to which people were committed to having their views about kindergarten known. Because of the abundance of information found in the briefs, the deliberations of the Committee were both enriched and made more relevant.

The following is a summary of some of the major concerns expressed in the briefs and at the hearings.[2]

Desirability of Publicly-Supported Kindergartens

The most overwhelming conviction contained in the briefs was that kindergartens were categorically desirable. Ninety-nine briefs strongly supported the implementation of a province-wide publicly-supported kindergarten program for Saskatchewan.

In twenty-three of the briefs it was noted that kindergarten education was necessary because the most formative years in the develop-

[2]The reader should be cautioned concerning interpretation of the reference to the number of briefs which contained opinions on the issues discussed in this chapter. In that the format and content of briefs varied considerably, it should be noted that the issues discussed in briefs also varied in number. To conclude that the lack of an expression of opinion on a particular issue indicated a lack of interest or concern by the submitter would be erroneous and unjust. Essentially, briefs reflected the immediate concerns of the individuals and organizations on whose behalf they were submitted.

ment of a child's personality and learning patterns occur before he enters school.

In nineteen briefs the opportunity to detect physical, mental and emotional handicaps was referred to as an important reason for a universal kindergarten program. Thirty-eight briefs saw universal kindergartens as necessary to provide equal educational opportunity for all children. Some felt that a quality kindergarten program based on the principles of open education could be a source of rejuvenation for the whole system, having a kind of domino effect on what was considered to be a "rigid lock-step" program in Division I.

Despite general enthusiasm for the implementation of publicly-supported kindergartens, twenty-two individuals and local groups registered their opposition to this possibility. Reasons given for this point of view included the belief that the home is the best environment for five year old youngsters, the realization that the costs of implementing kindergartens would result in increased taxes, the contention that kindergartens are primarily baby-sitting agencies for the convenience of working mothers, and a fear that rural children might suffer from unequal educational opportunity because of population sparsity and geographic location.

Five briefs referred to the lack of conclusive evidence to indicate that children who attend kindergarten are any more successful in later school years than those who do not. Those who saw formal schooling as rigid and potentially deadening did not want to see another year added to this process. Still others indicated that they had managed to get along very well without the benefit of kindergarten.

In commenting on the desirability or undesirability of publicly-supported kindergartens, most briefs referred to the nature and format

of privately-operated programs. For example, in forty-four briefs it was noted that the fees charged by private kindergartens were prohibitive for some families and made kindergarten education impossible for their children. This was especially true in rural areas where parents had to also assume responsibility for pupil transportation. On the other hand, twelve groups expressed concern at the expense of the additional facilities universal kindergarten would necessitate, as well as the increased costs of teachers' salaries and noon hour transportation.

Publicly-supported kindergartens were seen as desirable by those groups who recognized deficiencies in privately-operated programs. Such deficiencies included a lack of standards for teacher qualifications, inadequate facilities and equipment and insufficient integration with Division I. While some supporters of private kindergartens were quite willing to see them taken over by school boards, others were reluctant to lose the kind of control they presently had over the operation of the program. Although they felt the quality of kindergartens would be enhanced if they came under school board jurisdiction, they were concerned that parental interest and participation would be reduced.

Purposes of Kindergarten Programs

Fifty-five of the briefs stated that the primary purpose of kindergarten should be preparation for grade one, although the use of the term "preparation" seemed to vary from brief to brief. For some it referred to cognitive readiness, with emphasis on skill development and the acquisition of factual content. For others it implied an adjustment to school order and routine. In other cases, the hope was simply that kindergarten should result in an easier transition from the home to the school. At least three of the briefs, however, stated

specifically that readiness for grade one was not sufficient justification for kindergarten.

A large number of briefs focused on social and emotional growth as major purposes of kindergarten. Because the process of leaving home and relating to a new group of peers and adults can bring with it emotional strains, these people believed that the child needs to be helped to find ways of dealing with social experiences without sacrificing the growth of his self-esteem. Eighteen briefs stated that kindergarten should concern itself with the physical, intellectual and spiritual domains of the child.

Enchancement of a child's self-concept was seen to be a major purpose of kindergarten programs in twenty-eight briefs. These briefs emphasized the need for realistic and honest encouragement of a child so as to make full use of his ability to learn and grow. A number of other briefs saw "enrichment" to be important at this stage of a child's life. This would be accomplished by providing the child with a variety of cultural, recreational and social experiences, many of which would be acquired outside the classroom. Finally, thirty-one briefs viewed kindergartens as serving an important role in the appraisal of each child's needs and potential. The likelihood of arresting mental, physical and emotional handicaps recognized at this stage was seen as being much greater than if these handicaps were not detected until a later time.

Teacher Qualifications and Training

The importance of staffing kindergartens with suitable, well qualified teachers was consistently referred to in the briefs. Although a few briefs felt that personality alone was adequate for a kindergarten teacher, the major viewpoint was that kindergarten teachers should not only

have as much education as other elementary teachers, but that they should have specialized training in early childhood education.

In nineteen briefs it was felt that the university was responsible for developing appropriate training programs for kindergarten teachers. Some briefs suggested that additional grants should be provided for the initiation of a vastly expanded early childhood education program, while others felt this could be accomplished without additional funding. With respect to in-service training, nine briefs indicated that school boards should assume some responsibility for the upgrading of teacher qualifications. Five briefs expressed that it was the responsibility of school boards to provide bursaries to teachers who wished to upgrade their qualifications; other briefs which discussed this item did not indicate where financial responsibility for such programs should be.

There was general agreement that some form of retraining be required of teachers wishing to teach kindergarten who are at present either trained in primary methods or who are underqualified private kindergarten teachers. There was no consensus on the particular form this training should take, but the concern was expressed that potentially good teachers should not be lost because they lack the opportunity to upgrade their qualifications. Identified in one brief was a plea for more masculine participation in the field of early childhood education.

Other Considerations

A number of other considerations were dealt with in the briefs and at the hearings. Included here is a sample of some of the concerns which were expressed.

A large number of briefs favored a general shift in educational

priorities from the senior grades to the beginning years of school. This shift should be reflected not only in an emphasis on kindergarten programs but in all aspects of early childhood education, including nursery schools and day-care centres. In order to ensure that such programs receive sufficient funding, additional monies should be made available to them. Better co-ordination on the part of all agencies concerned with early childhood education programs was seen as necessary, with improved services for the handicapped being of particular importance. The concept of a community centre providing co-ordinated health, education and welfare services to pre-school children was suggested in a number of briefs.

In order to assist kindergarten teachers in providing quality programs, especially in difficult circumstances, a number of briefs indicated that teacher aides and parent volunteers should be utilized.

If kindergarten programs are to be phased-in, consideration should be given to the culturally deprived, to the handicapped and to the continuation of private programs.

Finally, the introduction of publicly-supported kindergartens should be accompanied by an educational program to make parents and the public aware of the objectives of kindergartens, and by continued research into all aspects of early childhood education.

These were some of the ideas and concerns expressed in the briefs and at the kindergarten hearings. Along with other information, they were considered by the Committee in its formulation of recommendations.

Chapter 5

# IMPLEMENTATION

In order to successfully implement publicly-supported kindergartens many operational implications need to be considered. These include such questions as the qualifications of teachers, provision of special services, format for kindergarten programs, public transportation, financial support and pilot projects. Without proper consideration of these matters, the type of program which is envisaged for the province will not be fully realized.

In this chapter a number of issues related to the implementation of kindergarten programs are discussed and appropriate recommendations presented.

## Teacher Qualifications, Training and Certification

The major determinant in the quality of kindergarten education is the teacher. Regardless of how favorable other factors might be, it is the teacher who will ultimately determine the success of the kindergarten program. For this reason, it is imperative that only appropriately qualified teachers be employed.

Two critical factors related to the suitability of kindergarten teachers are personality and the nature and extent of their preparation. Although as a Committee we could identify a number of attributes of kindergarten teachers, there is little point in providing a list of such qualities. We recognize that, in selecting kindergarten teachers, school boards will attempt to obtain as much information as possible about prospective teachers in order to employ the most suitable person for the position.

Regardless of how appropriate the personality of the teacher might be for working with young children, all kindergarten teachers

can benefit from extensive teacher education. This is particularly true of those educational programs which include a strong component of early childhood education. Because of the unique nature of pre-school programs, all prospective kindergarten teachers, including those with background and experience in the primary grades, should have training directly related to early childhood education.

While recognizing the value of many years of teacher education in a program designed for teachers of young children, we do not consider that kindergarten teachers should be required to take certain university classes to qualify for a certificate in order to teach kindergarten. Even though it is acknowledged that some teachers who will be involved with kindergarten programs may be underqualified, the solution to this problem is not to impose special certification requirements.

Rather, it would seem more profitable to influence school boards to employ the best qualified teachers they can obtain, encourage teachers to acquire as much training as they can, provide a variety of pre-service and in-service programs which are easily accessible, and support financially those teachers who wish to improve their qualifications. With respect to the latter, we have included a proposal for a bursary and scholarship program which could serve to meet the need for well trained kindergarten teachers and consultants in the province. (See Appendix C).

With respect to teacher education and certification, the Committee recommends:

3. THAT KINDERGARTEN TEACHERS BE CERTIFICATED ON THE SAME BASIS AS OTHER TEACHERS.

4. THAT BECAUSE SPECIALIZATION IN EARLY CHILDHOOD EDUCATION IS HIGHLY DESIRABLE, TEACHER EDUCATION PROGRAMS IN THE FIELD OF EARLY CHILDHOOD EDUCATION BE EXPANDED AND MADE MORE ACCESSIBLE.

5. THAT BURSARIES AND SCHOLARSHIPS BE PROVIDED BY SCHOOL BOARDS AND THE PROVINCIAL GOVERNMENT TO ASSIST KINDERGARTEN TEACHERS AND CONSULTANTS IN PURSUING APPROPRIATE PROGRAMS.

Curriculum Development

While recognizing that a curriculum guide should never be considered as a substitute for adequate teacher preparation, the Committee is aware of the value which teachers can derive from a source book that offers an abundance of material, ideas and suggestions which can be applied to the kindergarten program. Such a guide should contain a discussion of the philosophy and objectives of kindergarten programs, as well as curriculum ideas intended to facilitate these objectives.

To supplement this curriculum guide, a resource handbook containing numerous practical suggestions for kindergarten teachers should be prepared. This resource book should be developed in conjunction with teacher education courses and be continuously updated.

A committee should also investigate the availability of radio and television programs and their suitability for early childhood education in the province.

With respect to curriculum development, the Committee recommends:

6. THAT THE DEPARTMENT OF EDUCATION ESTABLISH A KINDERGARTEN CURRICULUM COMMITTEE WHOSE FUNCTIONS WOULD INCLUDE THE DEVELOPMENT OF A CURRICULUM GUIDE AND A

KINDERGARTEN TEACHERS' RESOURCE HANDBOOK; AND THAT THERE BE LAY REPRESENTATION ON SUCH A COMMITTEE.

Consultative Services

It is advisable during the implementation of any new program that consultative services be available to those involved with the program. This is true not only in the case of teachers, especially those teaching the program for the first time, but also for administrators and school boards. The provision of qualified consultants for kindergarten programs is seen as particularly important because the professional training of most teachers of kindergarten does not include a strong component of early childhood education; many school administrators are unfamiliar with kindergarten programs; instructional methods at higher grade levels may be inappropriate at the kindergarten level; and new facilities and equipment may be required for implementation of the program.

For these reasons, the Committee recommends:

7. THAT KINDERGARTEN CONSULTANTS BE AVAILABLE TO SERVE TEACHERS, ADMINISTRATORS AND SCHOOL BOARDS IN FACILITATING THE IMPLEMENTATION OF KINDERGARTEN PROGRAMS; AND THAT THE DEPARTMENT OF EDUCATION ASSUME MAJOR RESPONSIBILITY FOR THE PROVISION OF SUCH CONSULTATIVE SERVICES.

Special Education

The number of briefs presented on behalf of organizations concerned with various aspects of special education reflected the high level of interest there is in Saskatchewan in the education, health and welfare of children who are exceptional. These briefs documented

numerous alternatives concerning services to handicapped children and how these could be enhanced through the implementation of publicly-supported kindergartens.

If such programs could achieve as much as some groups implied, in terms of diagnosing learning disabilities, compensating disadvantaged children, reversing mental retardation and detecting health disorders, then they certainly deserve high government priority. However, the Committee was not as confident that publicly-supported kindergartens could provide as many of the answers to the problems related to the education of exceptional children as these groups suggested.

While we recognize that the diagnosis of certain disabilities can be initiated during the year at kindergarten, the existence of kindergartens alone may only have a limited effect on improving the situation with respect to special education.

If the real problems in this area are related to insufficient funding, lack of trained personnel, inadequate co-ordination on the part of responsible agencies, high pupil-teacher ratios and disadvantaged homes, the introduction of kindergartens alone can result in only limited improvements to the situation. However, in acknowledging this possibility with respect to the delivery of services to exceptional children, the Committee recommends:

8. THAT THE DEPARTMENT OF EDUCATION, THROUGH ITS REPRESENTATION ON THE PROVINCIAL HEALTH, EDUCATION, WELFARE COMMITTEE, ASSUME LEADERSHIP IN BETTER CO-ORDINATING THE EFFORTS OF THOSE AGENCIES CONCERNED WITH THE DIAGNOSIS AND REMEDIATION OF LEARNING-RELATED DISABILITIES IN EXCEPTIONAL CHILDREN.

## Pre-Kindergarten Programs in Early Childhood Education

Although the Committee's terms of reference included only the education of children who would be eligible to enter Year 1 in a year's time, we have been made aware of the importance of pre-kindergarten programs, particularly day-care centres and nursery schools. This awareness stems from the following: the contention of many groups that kindergarten is too late to provide needed learning experiences for young children, particularly the opportunity to detect and diagnose learning and related disabilities; inadequacies and discrepancies in the quality of personnel operating day-care centres and nursery schools; the fact that nursery schools in Saskatchewan are not licensed; the need for teacher training programs dealing with all aspects of early childhood education; deficiencies in program standards; and the limited co-ordination of health, education and welfare services.

Because of these concerns, the Committee recommends:

9. THAT THE MINISTER OF EDUCATION CONTINUE TO SUPPORT THE PROVINCIAL HEALTH, EDUCATION, WELFARE COMMITTEE AND ENCOURAGE THE COMMITTEE TO CONCERN ITSELF WITH ALL ASPECTS OF EARLY CHILDHOOD EDUCATION PROGRAMS, INCLUDING TEACHER QUALIFICATIONS, PROGRAM STANDARDS AND THE LICENSING OF NURSERY SCHOOLS AND DAY-CARE CENTRES.

## Research

Research in the field of early childhood education has been extensive in recent years, especially as it concerns the education of disadvantaged children. Although much of this research has applic-

ability for the Saskatchewan situation, it in no way provides answers to all the issues related to the implementation of kindergartens in the province. Only as a result of a continuous program of research can the most rational decisions about the direction of early childhood education be made. With this in mind the Committee recommends:

10. THAT RESEARCH IN THE FIELD OF EARLY CHILDHOOD EDUCATION BE UNDERTAKEN, ENCOURAGED AND SUPPORTED BY THE DEPARTMENT OF EDUCATION AND ALL OTHER AGENCIES CONCERNED WITH EDUCATIONAL RESEARCH IN THE PROVINCE.

Two specific areas of concern to the Committee with respect to research on kindergartens are that any research carried out to assess the value of early childhood education should evaluate kindergarten programs in terms of the objectives appropriate to such programs; and, that consideration should be given to a cost-benefit analysis of kindergarten programs in order to assist school boards and administrators in establishing priorities for their total program.

Local Decision-Making

As noted in chapter two, the Committee wishes to emphasize that as many decisions as possible regarding kindergarten should be made at the local level. These decisions should reflect not only the various ways in which kindergarten programs might be implemented; more importantly, they should convey the intent of the community to sanction publicly-supported kindergartens in their jurisdiction.

Because of the strong expression of opinion in the briefs in favour of the establishment of publicly-supported kindergartens, the Committee is confident that the majority of school boards will implement

kindergartens as soon as it is possible to do so.

Because we believe that school boards respond to the wishes of those they represent and are concerned about providing quality education programs the Committee recommends:

11. THAT SCHOOL BOARDS BE ENCOURAGED, BUT NOT COMPELLED, TO ESTABLISH PUBLICLY-SUPPORTED KINDERGARTEN PROGRAMS IN THEIR JURISDICTION.

Phasing-In Kindergarten Programs.

It is recognized that some school boards who would like to introduce publicly-supported kindergartens may find themselves in the position of not being able to implement them throughout their school system at the same time. This could result from such factors as a lack of appropriate facilities, inadequately trained teachers or the desire to test certain programs on a pilot basis. For example, some boards may wish to inaugurate kindergartens for disadvantaged youngsters or provide additional services to kindergarten age children who have learning disabilities.

Rather than requiring such boards to wait until they are able to provide suitable kindergarten programs for all youngsters in their jurisdiction, the Committee recommends:

12. THAT SCHOOL BOARDS PLANNING TO PHASE-IN KINDERGARTEN PROGRAMS SHOULD BE PROVIDED WITH GRANT SUPPORT TO REFLECT THE DEGREE AND TYPE OF IMPLEMENTATION.

Attendance at Kindergarten

The Committee considered the following two questions regarding attendance at kindergartens: at what age should youngsters be eligible

to attend kindergarten; and, should attendance at publicly-supported kindergartens be compulsory?

With regard to the first question, the Committee recommends:

13. THAT ENTRANCE AGE FOR CHILDREN ATTENDING KINDERGARTEN BE A SCHOOL BOARD DECISION, WITH THE UNDERSTANDING THAT ONLY THOSE YOUNGSTERS WHO WOULD BE ELIGIBLE TO ENTER DIVISION I THE FOLLOWING SCHOOL YEAR BE INCLUDED IN THE KINDERGARTEN PROGRAM.

In order to facilitate this recommendation, the Committee recommends:

14. THAT SECTION 213 OF THE SCHOOL ACT BE AMENDED TO READ AS FOLLOWS:

> "A school board may at the expense of the district make provision for the offering of instruction and training to children who have reached an age at which they may within one year be enrolled in grade 1 or Division I in the district."

On the question of whether youngsters who are entitled to attend kindergarten should be required to do so, the Committee was strongly of the opinion that attendance at kindergarten be permissive. We concurred with the view expressed by many that it is the right of the parent to determine whether his child will go to kindergarten. Despite the fact that, if publicly-supported kindergartens were instituted the vast majority of youngsters would attend, the principle of parental prerogative at this stage of a child's life should be upheld.

As a result, the Committee recommends:

15. THAT ATTENDANCE AT KINDERGARTEN SHOULD NOT BE COMPULSORY.

16. THAT EXISTING LEGISLATION CONCERNING COMPULSORY

SCHOOL ATTENDANCE REMAIN UNCHANGED.

Length of Day and Length of Term

Present practices with respect to the structure and format of kindergarten programs vary considerably across the province. In some jurisdictions youngsters attend for half a day throughout the year; in others, they attend for a full day every day for a few weeks or every other day for a longer term. The majority of urban jurisdictions have a ten-month kindergarten term, while most rural programs are held for shorther periods and usually in the spring.

As well as discovering the extent of diversity in the format of present kindergarten programs, the Committee was made aware of the degree to which people were committed to the way in which their program is presently structured. Lively discussions were held at the hearings on the merits of half-day versus full-day programs, and there appeared to be neither consensus nor research evidence to indicate that one approach is more valid than the other.

Rather than favoring the establishment of any one format, the Committee's opinion is that this decision should also be taken at the local level. This seems particularly appropriate in view of the fact that in some jurisdictions the choice of a half-day or a full-day format will affect the type of transportation required and the cost which will be subsequently incurred. For these reasons, the Committee recommends:

17. THAT THE LENGTH OF THE SCHOOL DAY (HALF-DAY OR FULL-DAY) AND THE NUMBER OF DAYS PER WEEK SHOULD BE AT THE DISCRETION OF THE SCHOOL BOARD.

In considering the question of the length of the kindergarten term, the Committee again acknowledged the importance of this being a

local decision. However, in order to provide time for the activities of a well-balanced kindergarten program, the Committee agreed that a minimum number of days should be ensured. In order that youngsters will obtain the maximum benefits possible from the kindergarten program, the Committee recommends:

18. THAT THE LENGTH OF THE KINDERGARTEN TERM BE THE EQUIVALENT OF 80 TO 100 FULL DAYS PER YEAR, WITH SCHOOL BOARDS DETERMINING THE EXACT NUMBER OF DAYS, AND THE PROVINCIAL GRANT FORMULA REFLECTING THIS DECISION.

Kindergarten Class Size

Despite the reaction on the part of educators which accompanies any move to increase the ratio of pupils to teachers, there is little empirical evidence to support any single view regarding the effect of the pupil-teacher ratio on educational outcomes. The relationship between the size of the class and the learning of pupils is obviously a complex one, with many factors having to be considered before any definite conclusions can be reached.

At the same time, there are few people who would argue with the view that smaller classes facilitate pupil-teacher interaction and contribute to individualized instruction. The question of the optimum number of pupils for kindergarten classes received considerable attention by the Committee. Having concerned itself with both the educational and economic implications of class size for regular kindergarten classes, the Committee recommends:

19. THAT THE AVERAGE NUMBER OF PUPILS FOR KINDERGARTEN CLASSES SHOULD BE 20 - 25.

20. THAT IN ANY CLASS OF MORE THAN 25 PUPILS A TEACHER AIDE SHOULD BE EMPLOYED TO ASSIST THE TEACHER.

21. THAT WHEN THE NUMBER PER CLASS REACHES 32, PUPILS SHOULD BE DIVIDED INTO TWO CLASSES.

22. THAT THE MINIMUM NUMBER OF PUPILS NEEDED TO OPERATE A SEPARATE KINDERGARTEN CLASS SHOULD BE 10.

23. THAT IF THERE ARE FEWER THAN 10 PUPILS THEY SHOULD BE PLACED IN THE YEAR I CLASSROOM, AND A TEACHER AIDE BE EMPLOYED TO ASSIST.

Classroom Facilities and Equipment

Although it has been maintained that the success of any kindergarten program will be dependent to a large degree on the quality of the teacher, it is also recognized that no teacher can be expected to function adequately unless supported by facilities and equipment which are appropriate for kindergarten purposes.

Foremost among these is an adequate classroom. Because of projected decreased enrolments and population shifts within the province, many school boards will have available classroom space which would have been at a premium five years ago. In other cases, there will not be sufficient space in existing schools to accommodate a kindergarten class. As a result, school additions or portable classrooms will be needed to provide adequate facilities.

Regarding appropriate space for kindergarten classes, the Committee recommends:

24. THAT WHERE POSSIBLE, THE KINDERGARTEN CLASSROOM

SHOULD BE LOCATED WITHIN THE SCHOOL BUILDING.

25. THAT IF THE ADDITION OF A PORTABLE CLASSROOM IS NECESSARY, A CLASS OTHER THAN KINDERGARTEN SHOULD BE LOCATED IN THE PORTABLE.

In formulating recommendations regarding facilities and equipment, the Committee was faced with a dilemma: If we were to recommend what we deemed to be ideal facilities for kindergarten classrooms, these could be considered by some boards to be too expensive; however, if no standards were recommended for kindergarten facilities, the welfare of the children and the success of the program could be jeopardized.

Faced with this dilemma, the Committee investigated a number of proposals for kindergarten classrooms and selected those features considered to be essential, but which would not add significantly to the cost of the unit. The classroom models reviewed by the Committee and the recommendations related to them are found in Appendix D.

The Committee also approved a list of recommended kindergarten equipment for individual classrooms which is included in Appendix E.

Pupil Transportation

Perhaps the most important factor affecting the implementation of publicly-supported kindergartens in rural areas is that of transportation. Unless satisfactory arrangements can be made to convey pupils to and from kindergarten classes, the implementation of kindergarten programs may be severly curtailed.

The major problem with respect to adequate transportation is a financial one. If day-long kindergartens are introduced, a minimal extension of conveyance services may be required. However, if half-day programs are considered, then substantial changes will need to be

made. These modifications to existing services are possible only if they are appropriate to the kindergarten program being proposed, and if sufficient financial assistance is forthcoming.

Therefore, the Committee recommends:

26. THAT THE MEANS BY WHICH KINDERGARTEN PUPILS ARE CONVEYED TO AND FROM SCHOOL SHOULD BE A LOCAL DECISION, WITH GRANT SUPPORT BEING AVAILABLE FOR THOSE JURISDICTIONS CONVEYING KINDERGARTEN PUPILS.

Financial implications of various types of transportation arrangements are discussed in chapter six.

Kindergarten in Rural Areas

Difficulties in providing kindergarten programs in sparsely populated parts of the province were a concern expressed by many people. With the decline of pupil population in many rural areas, the possibility of maintaining a viable kindergarten program becomes increasingly difficult. Despite the problems that are apparent, the Committee believes that all children in the province should have access to some type of worthwhile kindergarten program. The sparsity of population should not be a deterrent to the implementation of kindergarten, nor should geographic location be an insurmountable obstacle in any child's access to kindergarten experiences.

We would urge school boards to explore various possibilities in order to provide kindergarten programs. These might include the employment of itinerant teachers in outlying areas, the provision of programs at times of the year conducive to travel or the outfitting of mobile kindergarten units.

Recognizing that in some school jurisdictions the introduction of publicly-supported kindergartens will mean that these youngsters will be added to the Division I classroom, the Committee recommends:

27. THAT TEACHER AIDES BE EMPLOYED TO ASSIST TEACHERS IN MULTI-GRADE CLASSROOMS SERVING KINDERGARTEN YOUNGSTERS IN ORDER TO FACILITATE A SUITABLE PROGRAM FOR ALL PUPILS.

Financing Publicly-Supported Kindergartens

The implementation of kindergarten will depend largely upon the financial support available to school boards through provincial grants. The present level of property taxation and the regressive nature of the tax make it highly unlikely that school boards will implement kindergarten programs if they must rely extensively on property taxation. Therefore, in the interests of equalization of opportunity and tax burden, provincial assistance to school districts implementing kindergartens is imperative. The Committee recommends:

28. THAT THE COMPUTATIONAL MILL RATE IN THE GRANT FORMULA NOT BE INCREASED BEYOND ITS PRESENT LEVEL FOR THE PURPOSE OF IMPLEMENTING KINDERGARTENS.

Furthermore, the Committee firmly believes that the implementation of kindergarten programs should not be undertaken at the expense of existing elementary and secondary education programs.

The study conducted for the Committee by Dr. A. J. Y. Guy on the economic implications of the implementation of kindergarten programs revealed that, assuming similar teacher qualifications in unit and city jurisdictions, in-school operational costs per pupil in school units

were substantially greater than in urban jurisdictions. Lower pupil-teacher ratios in school units resulting from sparse populations and rural-urban migration were a major contributing factor to the higher costs in school units. School unit boards frequently cannot adjust their class loads without imposing undue hardships on students and staff. In view of this, the Committee recommends:

29. THAT RECOGNIZED EXPENDITURES IN THE GRANT FORMULA BE ADJUSTED TO REFLECT DIFFERENCES IN IN-SCHOOL OPERATIONAL COSTS BETWEEN SCHOOL UNITS AND URBAN DISTRICTS.

While it is anticipated that the length of kindergarten terms will not exceed 100 equivalent full days, the cost of providing suitable kindergarten programs will be more than one-half the cost of a Division I program. Certain basic costs such as maintenance and administration remain constant, even though kindergarten classes are operated on a half-time basis. Furthermore, if kindergarten teachers have some specialized training in early childhood education, their salaries will probably be higher than the average salary for teachers in Divisions I and II. Therefore, the Committee recommends:

30. THAT IN THE GRANT FORMULA, RECOGNIZED EXPENDITURES PER PUPIL FOR KINDERGARTEN PUPILS BE SET AT 60 PERCENT OF THE RECOGNIZED EXPENDITURE FOR DIVISION I AND II PUPILS.

The Guy study revealed that school unit boards implementing half-day kindergarten programs will incur high transportation costs. In order to promote accessibility to kindergarten programs and to minimize the deterrent effect of transportation costs, the provincial government

must provide additional grants to offset these costs. Therefore, the Committee recommends:

31. THAT PROVINCIAL GRANTS REFLECT THE ADDITIONAL TRANSPORTATION COSTS TO BE INCURRED FOR THE IMPLEMENTATION OF KINDERGARTENS IN RURAL SCHOOL JURISDICTIONS.

Finally, capital projects will be undertaken by school districts in order to provide classroom facilities or to upgrade existing ones. Substantial provincial capital grants to school boards implementing kindergartens will be required. Therefore, we recommend:

32. THAT PROVINCIAL GRANTS BE MADE AVAILABLE TO COVER CAPITAL BUILDING AND EQUIPMENT COSTS FOR THE IMPLEMENTATION OF KINDERGARTENS.

Alternative Kindergartens

A prevalent argument in education today is that provision should be made within the public school system for alternative forms of learning experiences to those typically found in most schools. This argument stems from such diverse sources as educational critics, disenchanted parents, free school proponents and educational economists. For a variety of reasons, these people are proposing that the traditional means of acquiring an education are no longer acceptable and that alternatives must be developed to meet the pluralistic needs of present day society.

Kindergarten programs have not been immune from this plea for diversity. In fact, because of most people's confidence in the efficacy of early childhood education, the nature of such programs has been the subject of much recent debate. Because it is obvious that there is no one best type of kindergarten program and, in accordance with our emphasis on local autonomy, the Committee recommends:

33. THAT SCHOOL BOARDS BE EMPOWERED TO PROVIDE ALTERNATIVE KINDERGARTEN PROGRAMS BASED ON PARTICULAR COMMUNITY NEEDS.

## Support for Private Kindergartens[1]

The Committee anticipates that in response to public demand, and given adequate financial support, most school boards in Saskatchewan will implement publicly-supported kindergartens in their jurisdictions. However, we recognize that some boards may wish to see the continuation of presently existing private programs, either because these programs are serving a valuable purpose or the board is unable to provide its own facilities for the program.

Recognizing these possibilities, the Committee recommends:

34. THAT SCHOOL BOARDS BE GIVEN AUTHORITY TO SUPPORT PRIVATE KINDERGARTEN PROGRAMS, PROVIDED THAT NO TUITION FEES ARE CHARGED; THAT SUCH PROGRAMS MEET DEPARTMENT OF EDUCATION STANDARDS; AND, THAT THEY ARE APPROVED BY THE SUPERINTENDENT OR DIRECTOR OF EDUCATION.

## Pilot Projects

It is anticipated that most school boards planning to introduce publicly-supported kindergartens will have a number of questions regarding the most appropriate means by which to implement such programs.

---

[1] With the assistance of District Superintendents of Education, the Committee undertook a survey of private kindergartens in Saskatchewan. A summary of results is contained in Appendix F.

These could include the type of facilities to be used, arrangements for pupil transportation and the utilization of teacher aides. Through consultation with local administrators, teachers and parents, many of these questions will be resolved.

Nevertheless, many boards will require some assurance that the nature and format of the kindergarten program they are proposing will be in the best interests of the people involved. They will need access to pertinent information derived from the experiences of jurisdictions similar to theirs, and on which they can make more informed decisions about the nature of their own program.

To facilitate the successful implementation of province-wide, publicly-supported kindergartens in Saskatchewan, the Committee recommends:

35. THAT THE DEPARTMENT OF EDUCATION INITIATE A NUMBER OF PILOT PROJECTS DURING THE SCHOOL YEAR 1972-73 IN ORDER TO PROVIDE INFORMATION ON THE OPERATION OF KINDERGARTENS.

The purpose of these projects would be to investigate some of the alternative arrangements for kindergarten programs and to draw some conclusions concerning their feasibility and desirability. While it would not be possible to conduct research on all the variables related to kindergarten education, at lease two general areas deserve consideration.

The first relates to the format of the kindergarten program and includes such variations as full-day or half-day programs; consecutive days for a shorter term or alternate days for a longer period; and the most suitable times of the year in which to operate kindergarten programs. The second concerns the implementation of kindergartens in areas of low

population density. Here, pilot projects could deal with such proposals as the use of itinerant teachers, kindergarten trailers and the implications of including kindergarten children in Division I classes.

The selection of variables for the pilot projects should be made on the basis of the widest possible application of results.

Therefore, the Committee recommends:

36. THAT THE NUMBER OF PILOT PROJECTS, THE EXACT NATURE OF THE PROJECTS AND THE SCHOOL JURISDICTIONS TO BE INVOLVED BE LEFT TO THE DISCRETION OF THE DEPARTMENT OF EDUCATION.

Chapter 6

# ANALYSIS OF COSTS

The terms of reference of the Minister's Committee on Kindergarten Education included the determination of the costs of implementing publicly-supported kindergartens throughout the province. As a result, the Committee commissioned a cost and feasibility study. The research was conducted by Dr. A. J. Y. Guy, Associate Professor of Education and Co-ordinator of Budget Program Services, Faculty of Education, University of Saskatchewan, Regina Campus.

Because of time and financial constraints, the Committee decided to use a representative sample of school jurisdictions rather than the total population. School units were selected on the basis of location in the province; population distribution within the unit; number of schools and their geographic location; and whether the school unit supplied or contracted pupil transportation. Urban districts were selected on the basis of total city population; public and separate school administrative authority; development of grant-supported kindergartens; and school size and geographic location within the urban districts.

The school units selected were Borderland, Indian Head, Long Lake, Outlook, Prince Albert, Shaunavon and Wadena. The urban districts in the sample were North Battleford Public and Separate Schools, Prince Albert Public and Separate Schools, Saskatoon Public and Separate Schools, Swift Current Public Schools and Yorkton Public and Separate Schools.

Pilot studies were conducted in Outlook School Unit and the North Battleford City Districts to assist in the development of suitable data collection procedures. Questionnaires were designed, followed by interviews to ensure the accuracy of the data which were to be collected by the use of the survey instrument.

The Committee instructed Dr. Guy to prepare a report on the cost study for presentation to the Minister along with the Committee's final report. The data included in this chapter are a summary of the major findings of the cost study. The details of the cost study analysis are not included in this Report.

Demographic Analysis of Sample Jurisdictions

The data collected on potential kindergarten enrolments for the four-year period beginning in 1972 revealed a pattern of decreasing enrolments. The potential sample kindergarten enrolments for the four-year periods are: 1972 - 4,593; 1973 - 4,684; 1974 - 4,580; 1975 - 4,390. Although a slight increase is predicted for 1973, the overall decrease is 4.42% of the potential sample enrolment for September, 1972.

The major decrease in enrolments will occur in the school units. Although 842 potential 1972 kindergarten pupils were counted in the seven sample units, the 1975 potential is 754, a 10.45% decrease. A less pronounced, but still evident, decrease in potential enrolments occurs in the urban centres. An overall reduction of 3.07% in urban kindergarten enrolments from 1972 to 1975 is projected. The 1972 potential is 3,751 pupils in the sample urban districts compared with the 1975 potential of 3,636 pupils. A slight enrolment increase is indicated for both urban and unit jurisdictions in 1973.

The findings of the Guy study mirror the Saskatchewan Department of Public Health, Vital Statistics Division, figures on the Saskatchewan birth rate for the four-year period beginning in 1967.

Future Provincial Enrolment Projections

In order to project enrolments for the province, it was assumed that: 1) the sample data were accurate; 2) the ratio of potential kinder-

garten enrolments for 1972 to the total enrolment of Division I, Year I pupils in 1971-72 represented an accurate ratio figure to predict kindergarten enrolments in all non-sample jurisdictions for 1972;[1] 3) the ratios for subsequent years represented an accurate ratio figure to predict kindergarten enrolments in non-sample jurisdictions for 1973, 1974, 1975; and 4) the centres in which the pupils were identified were the same places in which the pupils were expected to enrol in kindergarten programs.

Table I

Projected Kindergarten Enrolments
for Saskatchewan, 1972 - 1975

| Supt'cies | 1971-72 Division I Year I | 1972 Kindergarten | 1973 Kindergarten | 1974 Kindergarten | 1975 Kindergarten |
|---|---|---|---|---|---|
| Unit and Rural | 10,228 | 6,754 | 6,909 | 6,295 | 6,027 |
| Urban | 8,810 | 8,058 | 8,091 | 7,830 | 7,498 |
| Totals | 19,038 | 14,812 | 15,000 | 14,125 | 13,505 |

Table I provides a summary of projected provincial kindergarten enrolments for the four-year period beginning in 1972. The trends indicated are a function of birthrates and population migration trends as experienced in Saskatchewan. The overall decrease in potential rural kindergarten enrolment in 1972 from the Division I, Year I 1971-72 actual enrolment mirrors the declining provincial birthrate, the rural-urban migration factor and the provincial emigration factor.

---

[1] These ratios for urban and unit jurisdictions were generated separately. For detailed analysis, see Chapter IV of the Guy Report.

The provincial potential 1972 kindergarten enrolment compared with the 1971-72 Division I, Year I enrolment represents a decrease of 22.20%. The potential enrolments for 1972 and 1973 are relatively stable at approximately 15,000, but decreases of 5.5% and 4.4% are forecast for 1974 and 1975 respectively.

The enrolment trends identified in this section have considerable implications for school boards implementing kindergarten programs and planning for future school use. It is important that school boards make every effort to obtain the necessary demographic data for their jurisdiction before implementing kindergarten programs.

Capital Building and Equipment Costs - Sample Jurisdictions[2]

Two types of capital building costs were considered: 1) the cost of constructing additional classrooms resulting from the implementation of kindergartens; and 2) the cost of constructing classrooms in non-utilized space in existing schools.

Capital equipment costs were defined as the cost of equipping a kindergarten classroom or the cost of upgrading a Division I classroom to house both kindergarten and Division I pupils, depending on the circumstances.

Assuming full implementation of kindergartens in all sample jurisdictions in the fall of 1972, the total capital building and equipment costs for the sample districts would be $500,797 and $538,696 respectively. The total cost for the sample jurisdictions would be

---

[2]The assumptions underlying the calculation of the capital building and equipment costs are detailed in Chapter II of the Guy Report.

$1,039,491. If implementation of kindergartens were delayed, it is expected capital building and equipment construction costs would increase by 10% annually. Consequently, this inflation factor is built into the projected costs for 1973, 1974, 1975.

A projection of total provincial capital building and equipment costs was not made from the sample data, owing to the unique nature of each particular situation. However, the necessary methodology to collect data for the entire province is readily available, and the Department of Education should undertake to collect such data in the near future. Time constraints did not permit the Kindergarten Committee to pursue these cost projections further.

Table II

Capital Building and Equipment Costs
Sample Jurisdictions

| Jurisdiction | Enrolment | Capital Building Cost | Capital Equipment Cost | Totals |
|---|---|---|---|---|
| School Units | 842 | $ 84,270 | $170,909 | $ 255,177 |
| Urban Supt'cies | 3,751 | 416,527 | 367,787 | 784,314 |
| Total 1972 | 4,593 | 500,797 | 538,696 | 1,039,491 |
| Total 1973 | 4,684 | 550,877[1] | 592,566[1] | 1,143,440[1] |
| Total 1974 | 4,580 | 605,964 | 651,822 | 1,257,784 |
| Total 1975 | 4,390 | 666,561 | 717,004 | 1,383,563 |

[1]Includes a 10% Construction inflation factor

Program Establishment Costs - Sample Jurisdictions

The Minister's Committee on Kindergarten Education compiled a list of essential equipment and materials required for the establishment

of a kindergarten program within a school.[3] The initial requirements included: 1) initial equipment priced at $542 for classrooms of 15 to 30 kindergarten pupils; and 2) additional program establishment costs priced at $100 per classroom. The latter included the cost of providing kindergarten library books, teacher resource equipment and musical equipment. Cost adjustments were made to account for classroom situations with fewer than fifteen pupils.

As shown on Table III, the total program establishment costs for the sample jurisdictions would be $109,872 if kindergartens were fully implemented in the sample jurisdictions in 1972. A five percent equipment inflation factor is built into the projected 1973, 1974, 1975 costs.

Table III

Program Establishment Costs
Sample Jurisdictions

| School Jurisdiction | Program Establishment Cost |
|---|---|
| School Units | $ 34,415 |
| Urban Supt'cies | 75,457 |
| Total 1972 | 109,872 |
| Total 1973 | 115,366[1] |
| Total 1974 | 121,134 |
| Total 1975 | 127,191 |

[1]Includes a five percent cost inflation factor

[3]This list is presented in Appendix E.

## Annual Operational Costs[4]

The annual operational costs for kindergarten programs were determined for the year 1972 and projected for the years 1973, 1974 and 1975. The costs were determined on the basis of responses to a questionnaire designed for the study and assumptions made by the Minister's Committee. The major guidelines used in determining operational costs are listed below:

1) The maximum number of kindergarten pupils to be instructed by a kindergarten teacher will be twenty-four. Classes with more than 24, but fewer than 31 kindergarten pupils will have one teacher and one teacher aide. Classes with fewer than ten kindergarten pupils will be combined with Division I, with a teacher aide provided to assist the teacher.

2) Two teacher salary costs were used for determining instructional costs. The first was an annual salary of $7,086 (the average Division I teacher's salary for 1971-72); the second was an annual salary of $8,000 (the average midpoint salary of teachers in Class III of existing salary schedules).

3) The full-time teacher aide salary was set at $3,200 per annum.

4) The sample jurisdictions determined their costs for consumable supplies, library and resource centre, program equipment, caretakers' salaries, utilities and caretaking supplies. The costs provided by the jurisdictions served as the basis for projecting future costs.

---

[4]Assumptions underlying these costs are found in Chapter II of the Guy Report.

5) For the purpose of determining operational costs, it was assumed kindergarten classes would operate on a half-day basis for the 200-day school year.

6) Transportation costs were calculated on two bases: 1) the school jurisdiction providing full bus service including a noon turn around service; and 2) grants being made to parents to transport students during the noon hour at a rate of ten cents per mile with a minimum of $2.00 per day per child.

7) An inflation cost factor of seven percent was assumed for all personnel salaries, consumable costs, library and resource centre costs, program equipment costs, implementary costs and transportation costs.

Finally, it was assumed that sample jurisdictions were sufficiently representative of the total population to project operational costs for the total province.

In-School Operational Costs - Sample Jurisdictions

A. School Units

The average cost per pupil enrolled in the seven sample school units was $270.26 with a projected teacher salary of $7,086, and $293.05 with a projected teacher salary of $8,000. Table IV provides a summary of the 1972 costs as well as projected costs for 1973, 1974 and 1975. (See table IV on following page).

B. Urban Superintendencies

The average cost per pupil enrolled in the sample jurisdictions was $208.56 with a projected teacher salary of $7,086, and $230.12 with a projected teacher salary of $8,000 for the 1972 school year. Assuming an enrolment of 3,751 pupils, the 1972 total costs for these

jurisdictions would be $782,305 with a projected teacher salary of $7,086, and $863,194 with a projected teacher salary of $8,000. Table V provides a summary of the 1972 costs as well as the projected costs for 1973, 1974 and 1975.

Table IV

Total In-School Operational Cost by Year
All Sample School Units

| Year | Pupils | Total Cost[1] | Total Cost[2] | Cost Per Pupil[1] | Cost Per Pupil[2] |
|---|---|---|---|---|---|
| 1972 | 842 | $227,557 | $246,751 | $270.26 | $293.05 |
| 1973 | 863 | 244,903 | 266,418 | 283.78 | 308.71 |
| 1974 | 788 | 249,379 | 370,833 | 316.47 | 343.70 |
| 1975 | 754 | 254,327 | 275,038 | 337.30 | 364.77 |

[1] Based on Teacher Salary of $7,086

[2] Based on Teacher Salary of $8,000

Table V

Total In-School Operational Cost by Year
All Sample Urban Superintendencies

| Year | Pupils | Total Cost[1] | Total Cost[2] | Cost Per Pupil[1] | Cost Per Pupil[2] |
|---|---|---|---|---|---|
| 1972 | 3,751 | $782,305 | $ 863,195 | $208.56 | $230.12 |
| 1973 | 3,821 | 874,678 | 967,586 | 228.91 | 253.23 |
| 1974 | 3,792 | 930,949 | 1,029,847 | 245.50 | 271.58 |
| 1975 | 3,636 | 944,188 | 1,040,478 | 259.68 | 286.16 |

[1] Based on Teacher Salary of $7,086

[2] Based on Teacher Salary of $8,000

C. Summary of Sample In-School Operational Costs

If all sample jurisdictions implemented kindergarten programs in 1972, the total annual in-school operational cost, based on an average teacher salary of $7,086 would be $1,009,862. If the average teacher

salary were $8,000, the corresponding cost would be $1,109,946.

The lower pupil-teacher ratios experienced in school units were a major factor contributing to school unit per pupil in-school operational costs which, on the average, were 21.89 percent higher than urban costs. It would seem appropriate that provincial school grants be structured to reflect this difference.

Transportation Costs - Sample School Units

The identification of costs concerning the conveyance of kindergarten pupils to or from school during noon hour--a service required if half-day kindergarten programs were provided--was a major aspect of the study.

Transportation costs were computed on two bases: 1) Parent Transportation Grants (PTG) of ten cents per mile round trip with a minimum of two dollars per day; and 2) School Jurisdiction Transportation Cost (SJTC), the increased cost of providing the required transportation by the school jurisdiction as determined by the jurisdiction.

The total cost in 1972 of providing a transportation service in the seven sample units, using the Parent Transportation Grants (PTG) mode would be $225,212 or $267.47 per pupil. The corresponding cost using the School Jurisdiction Transportation Cost (SJTC) mode would be $518,240 or $615.48 per pupil.

It is evident that transportation costs could be a major deterrent to the implementation of kindergarten programs in rural Saskatchewan unless provincial financial assistance is extended to rural school districts and units or alternatives to the half-day operation of kindergartens are developed.

Total Operational Costs by Year - Sample School Units

Total operational costs include in-school operational costs and transportation costs. They are projected from 1972 to 1975.

Table VI presents the dollar costs projected for the four-year period beginning in 1972. The per-pupil costs are presented in Table VII.

Table VI

Total Operational Cost by Year
Sample School Units

| Year | Pupils | Total Operation[1] | Total Operation[2] | Total Operation[3] | Total Operation[4] |
|---|---|---|---|---|---|
| 1972 | 842 | $452,769 | $471,963 | $745,797 | $764,991 |
| 1973 | 863 | 475,575 | 497,090 | 799,470 | 820,985 |
| 1974 | 788 | 479,379 | 500,833 | 842,764 | 864,218 |
| 1975 | 754 | 484,804 | 505,518 | 889,168 | 909,882 |

[1] Teacher Salary at $7,086 per annum and Parent Transportation Grants

[2] Teacher Salary at $8,000 per annum and Parent Transportation Grants

[3] Teacher Salary at $7,086 per annum and School Jurisdiction Transportation

[4] Teacher Salary at $8,000 per annum and School Jurisdiction Transportation

Table VII

Total Operation Costs per Pupil by Year
Sample School Units

| Year | Pupils | Total Operation[1] | Total Operation[2] | Total Operation[3] | Total Operation[4] |
|---|---|---|---|---|---|
| 1972 | 842 | $537.73 | $560.53 | $ 885.74 | $ 908.54 |
| 1973 | 863 | 551.07 | 576.64 | 927.44 | 951.32 |
| 1974 | 788 | 608.35 | 635.58 | 1,069.50 | 1,096.72 |
| 1975 | 754 | 642.98 | 670.45 | 1,179.27 | 1,206.74 |

[1]Teacher Salary at $7,086 per annum and Parent Transportation Grants

[2]Teacher Salary at $8,000 per annum and Parent Transportation Grants

[3]Teacher Salary at $7,086 per annum and School Jurisdiction Transportation

[4]Teacher Salary at $8,000 per annum and School Jurisdiction Transportation

The effect of transportation costs is apparent in Tables VI and VII. When school jurisdictions supply bus transportation, the transportation costs account for approximately 70 percent of total operational costs. When the parents receive grants for transporting pupils, the transportation costs account for approximately 48 percent of total operational costs.

## Projected Provincial Operational Costs

The data generated from the sample were suitable for the projection of operational costs for the whole province. These projections were made for the four-year period beginning in 1972 on the assumptions utilized for the sample. The projections are accurate insofar as the sample jurisdictions are representative of the total population and the assumptions made by the Minister's Committee on Kindergarten Education are valid. All provincial projections assume a half-day operation for 200 days a year. Alternative arrangements in school units could conceivably result in reduced costs, particularly with respect to transportation. However, because of the large number of possible variations, the projection of costs for each alternative was not feasible.

### In-School Operational Costs

Tables VIII, IX and X provide total projected in-school operational costs for school units, urban superintendencies and the province for the four-year period beginning in 1972. These projections assume total implementation of kindergarten education in all jurisdictions.

Table VIII

Total Projected Kindergarten In-School Operational Cost for School Units by Year

| Year | Potential Enrolment | In-School Operational Cost 1* | In-School Operational Cost 2* |
|---|---|---|---|
| 1972 | 6,754 | $1,825,336.00 | $1,979,260.00 |
| 1973 | 6,909 | 1,960,636.00 | 2,132,877.00 |
| 1974 | 6,295 | 1,992,179.00 | 2,163,592.00 |
| 1975 | 6,027 | 2,032,907.00 | 2,198,469.00 |
| Total | 25,985 | $7,811,058.00 | $8,474,198.00 |

*Operational Cost 1 assumes a teacher salary of $7,086

*Operational Cost 2 assumes a teacher salary of $8,000

Table IX

Provincial Total In-School Operational Cost for Urban Superintendencies by Year

| Year | Potential Enrolment | In-School Operational Cost 1 | In-School Operational Cost 2 |
|---|---|---|---|
| 1972 | 8,058 | $1,680,510.00 | $1,854,489.00 |
| 1973 | 8,091 | 1,885,544.00 | 2,085,850.00 |
| 1974 | 7,830 | 1,922,278.00 | 2,126,487.00 |
| 1975 | 7,498 | 1,947,072.00 | 2,145,628.00 |
| Totals | 31,477 | $7,435,404.00 | $8,212,454.00 |

Table X

Provincial Total Projected In-School Operational Cost by Year

| Year | Potential Enrolment | In-School Operational Cost 1 | In-School Operational Cost 2 |
|---|---|---|---|
| 1972 | 14,812 | $ 3,505,846.00 | $ 3,833,749.00 |
| 1973 | 15,144 | 3,846,180.00 | 4,218,727.00 |
| 1974 | 14,125 | 3,914,457.00 | 4,290,079.00 |
| 1975 | 13,525 | 3,979,979.00 | 4,344,097.00 |
| Totals | 57,606 | $15,246,462.00 | $16,686,652.00 |

On the basis of the assumptions made by the Committee, the total in-school operational costs for kindergarten programs in all school units in 1972 would be $1,825,336 if the teacher's annual salary were $7,086, and $1,979,260 if the teacher's annual salary were $8,000. The corresponding figures for the urban superintendencies would be $1,680,510 and $1,854,489, respectively, and the total provincial costs would be $3,505,846 and $3,833,749.

Presently, nine Saskatchewan school districts operate a grant-funded universal kindergarten program for 3,902 pupils. Assuming costs identical to those used in the cost study, the present in-school operational costs for these kindergartens would be $907,130 with an average teacher salary of $7,086 and $1,001,597 with an average teacher salary of $8,000.

The net 1972 in-school operational costs for the introduction of kindergartens in those areas not presently operating such programs would be $2,598,716 with an average teacher salary of $7,086 and $2,832,152 with an average teacher salary of $8,000. The data are summarized in table XI.

Table XI

Provincial Total Projected Kindergarten In-School Operational Cost, 1972

| Jurisdiction | Potential Enrolment | In-School Operational Cost 1 | In-School Operational Cost 2 |
|---|---|---|---|
| Global Total | 14,812 | $3,505,846 | $3,833,749 |
| Less: Operational Kindergartens | 3,902 | 907,130 | 1,001,597 |
| Provincial Kindergarten Introduction Costs | 10,910 | $2,598,716 | $2,832,152 |

Total Operational Costs

Tables XII, XIII and XIV provide a summary of the total operational costs to be incurred with the introduction of kindergartens in those areas not presently operating publicly-supported kindergartens. In the tables, Operational 1 refers to costs based on a teacher salary of $7,086; Operational 2 refers to costs based on a teacher salary of $8,000; Mode 1 refers to transportation costs based on grants to parents; Mode 2 refers to transportation costs based on the school jurisdictions providing transportation.

The enrolments reported in these tables are the projected enrolments less the number of pupils presently in publicly-supported kindergarten programs. The projected costs are net introductory costs in addition to present costs but not including capital expenditures.

Two factors are evident from the data presented in the tables. Because of population sparsity and lower potential pupil-teacher ratios, the in-school operational costs in school units are substantially greater than in urban centres. The transportation costs projected for school units account for most of the vast difference in per pupil costs between rural and urban jurisdictions. The high transportation costs dictate that school units examine closely alternatives to the traditional half-day approach to kindergarten education.

Depending on the average teacher salary and the mode of transportation used, the projected operational cost of introducing kindergartens in 1972 in those areas not presently operating publicly-supported kindergartens ranges from $3,502,247 to $5,781,164. In addition to these costs, capital expenditures and program establishment costs must be considered.

Table XII

Total Provincial Projected Kindergarten Operational Cost to Introduce Kindergartens in Non-Kindergarten Operational Areas by Type of School Jurisdiction and Year

| Year | School Jurisdiction | Potential Enrolment | Total Operational Cost Operational 1 Mode 1 | Total Operational Cost Operational 2 Mode 1 | Total Operational Cost Operational 1 Mode 2 | Total Operational Cost Operational 2 Mode 2 |
|---|---|---|---|---|---|---|
| 1972 | School Units[1] | 6,521 | $3,502,247.00 | $3,651,236.00 | $5,775,822.00 | $5,781,164.00 |
| | Urban Superintendencies[2] | 4,389 | 836,350.00 | 921,172.00 | 836,350.00 | 921,172.00 |
| | Year Total | 10,910 | $4,338,597.00 | $4,572,408.00 | $6,612,172.00 | $6,702,336.00 |
| 1973 | School Units[1] | 6,669 | $3,675,639.00 | $3,745,667.00 | $6,064,431.00 | $6,340,495.00 |
| | Urban Superintendencies[2] | 4,650 | 1,136,512.00 | 1,259,654.00 | 1,136,512.00 | 1,259,654.00 |
| | Year Total | 11,319 | $4,812,151.00 | $5,005,321.00 | $7,200,943.00 | $7,600,149.00 |
| 1974 | School Units[1] | 6,076 | $3,696,337.00 | $3,861,817.00 | $6,498,218.00 | $6,563,672.00 |
| | Urban Superintendencies[2] | 4,465 | 1,091,486.00 | 1,187,921.00 | 1,091,486.00 | 1,187,921.00 |
| | Year Total | 10,541 | $4,787,823.00 | $5,049,738.00 | $7,589,704.00 | $7,751,593.00 |
| 1975 | School Units[1] | 5,818 | $3,692,276.00 | $3,930,680.00 | $6,761,242.00 | $7,008,854.00 |
| | Urban Superintendencies[2] | 4,271 | 1,099,311.00 | 1,212,062.00 | 1,009,311.00 | 1,212,062.00 |
| | Year Total | 10,089 | $4,791,587.00 | $5,142,742.00 | $7,860,553.00 | $8,220,916.00 |

[1] Includes In-School Operational Cost and Transportational Mode Cost excluding Operational Granted Kindergarten

[2] Includes In-School Operational Cost excluding Operational Granted Kindergartens

Table XIII

Total Projected Kindergarten Total Operational Cost for Non-Grant Funded School Units by Transportational Mode and Year

| Year | School Jurisdiction | Potential Enrolment | Total Operational Cost Operational 1 Mode 1 | Total Operational Cost Operational 2 Mode 1 | Total Operational Cost Operational 1 Mode 2 | Total Operational Cost Operational 2 Mode 2 |
|---|---|---|---|---|---|---|
| 1972 | All School Units | 6,754 | $3,627,538.00 | $3,781,839.00 | $5,975,209.00 | $5,992,854.00 |
| | Less Funded School Units[1] | 233 | 125,291.00 | 130,603.00 | 199,387.00 | 211,690.00 |
| | Non-Funded School Units | 6,521 | $3,502,247.00 | $3,651,236.00 | $5,775,822.00 | $5,781,164.00 |
| 1973 | All School Units | 6,909 | $3,807,896.00 | $3,884,061.00 | $6,287,017.00 | $6,568,812.00 |
| | Less Funded School Units[1] | 240 | 132,257.00 | 138,394.00 | 222,586.00 | 228,317.00 |
| | Non-Funded School Units | 6,669 | $3,675,639.00 | $3,745,667.00 | $6,064,431.00 | $6,340,495.00 |
| 1974 | All School Units | 6,295 | $3,829,566.00 | $4,001,009.00 | $6,732,438.00 | $6,803.854.00 |
| | Less Funded School Units[1] | 219 | 133,229.00 | 139,192.00 | 234,220.00 | 240,182.00 |
| | Non-Funded School Units | 6,076 | $3,696,337.00 | $3,861,817.00 | $6,498,218.00 | $6,563,672.00 |
| 1975 | All School Units | 6,027 | $3,826,659.00 | $4,070,804.00 | $7,007,714.00 | $7,261,063.00 |
| | Less Funded School Units[1] | 209 | 134,383.00 | 140,124.00 | 246,472.00 | 252,209.00 |
| | Non-Funded School Units | 5,818 | $3,692,276.00 | $3,930,680.00 | $6,761,242.00 | $7,008,854.00 |

[1]Includes School District # 1417 Paynton, School District # 2244 Gravelbourg, and School Unit # 25 Potashville.

Table XIV

Total Provincial Projected Kindergarten Operational Cost Per Pupil
to Introduce Kindergartens in Non-Kindergarten Operational Areas
by Type of School Jurisdiction and Year

| Year | School Jurisdiction | Total Operational Cost Operational 1 Mode 1 | Total Operational Cost Operational 2 Mode 1 | Total Operational Cost Operational 1 Mode 2 | Total Operational Cost Operational 2 Mode 2 |
|---|---|---|---|---|---|
| 1972 | School Units | $537.07 | $559.91 | $885.72 | $886.54 |
| | Urban Superintendencies | 190.55 | 209.88 | 190.55 | 209.88 |
| | Year Total | $397.67 | $419.10 | $606.06 | $614.32 |
| 1973 | School Units | $551.15 | $561.65 | $909.34 | $950.74 |
| | Urban Superintendencies | 244.41 | 270.89 | 244.41 | 270.89 |
| | Year Total | $425.13 | $442.20 | $636.18 | $671.45 |
| 1974 | School Units | $608.35 | $635.58 | $1,069.48 | $1,080 26 |
| | Urban Superintendencies | 244.45 | 266.05 | 244.45 | 266.05 |
| | Year Total | $454.20 | $479.05 | $720.01 | $735.37 |
| 1975 | School Units | $634.62 | $675.60 | $1,162.12 | $1,204.68 |
| | Urban Superintendencies | 257.38 | 283.78 | 257.38 | 283.78 |
| | Year Total | $474.83 | $509.73 | $779.12 | $814.83 |

## Summary of Major Findings

The major findings of the cost study are reported below:

1) Potential kindergarten enrolments in the four-year period beginning in 1972 mirror the province's decreasing birth rates. An overall reduction of 3.07 percent is projected for urban kindergarten enrolments and 10.45 percent for school unit kindergarten enrolments during this period. The projected kindergarten enrolments are: 1972 - 14,812; 1973 - 15,000; 1974 - 14,125; and 1975 - 13,505.

2) Under the assumptions of the study and assuming total implementation of kindergartens, the 1972 capital building and equipment costs for the sample jurisdictions would be $1,039,491. Of this total, school units would spend $255,177 and the urban districts $784.314. An inflation factor of ten percent is expected for each succeeding year. It was not possible to project total provincial capital building and equipment costs from the sample data.

3) The program establishment costs for the sample jurisdictions would be $109,872 if kindergartens were fully implemented in 1972. A five percent annual inflation factor is expected in the cost of these materials. Program establishment costs were not projected to the province as a whole.

4) In-School operational costs were calculated on two bases: 1) average teacher salary of $7,086; and 2) average teacher salary of $8,000. Assuming the lower teacher salary, the 1972 in-school operational costs per pupil would be $270.26 in school units and $208.56 in urban jurisdictions. Assuming the higher teacher salary, the corresponding costs would be $293.05 in school units and $230.12 in urban districts. The study revealed that in-school operational costs would be at least $60 per pupil higher in school units than in urban districts if teacher

qualifications were identical. The lower potential pupil-teacher ratios result from rural-urban migration, sparsity of population and distance from school factors. A seven percent inflation factor is expected in all in-school operational costs.

5. The cost of providing noon hour transportation to or from schools in school units would account for a major portion of total operational costs. If parents were paid ten cents per mile with a minimum of $2.00 per day, the 1972 average cost would be $267.47 per pupil, or 48 percent of total operational costs. If school units provided bus service, the 1972 average cost would be $615.48, or 70 percent of total operational costs. A seven percent inflation factor is expected in transportation costs.
6. Assuming an average teacher salary of $7,086, the total 1972 provincial in-school operational costs would be $3,505,846 for 14,812 pupils. School unit costs would be $1,825,336 for 6,754 pupils. If the average teacher salary were $8,000 the corresponding costs would be $3,833,749 for the province, $1,979,260 for school units, and $1,854,489 for urban districts.
7. The net 1972 in-school operational costs to implement kindergartens in jurisdictions not presently operating publicly-supported kindergartens would be $2,598,716 if the average teacher salary were $7,086 and $2,832,152 if the average teacher salary were $8,000.
8. Depending on the average teacher salary and the transportation mode used in the analysis, the projected total operational cost of introducing kindergartens in 1972 in those areas not presently operating publicly-supported kindergartens ranges from $3,502,247 to $5,781,164. In addition to these costs, capital expenditures and program establishment costs must be considered.

Recommendation

To facilitate the collection and analysis of data and to provide guidance to local administrators and the Department of Education concerning the implementation of kindergartens, the Committee recommends:

37. THAT THE QUESTIONNAIRES DESIGNED FOR THE COST STUDY BE USED IN ORDER TO PROJECT ACTUAL ENROLMENTS, CAPITAL COSTS AND OPERATIONAL COSTS PRIOR TO THE IMPLEMENTATION OF KINDERGARTEN PROGRAMS IN A SPECIFIC JURISDICTION.

# Chapter 7

## CONCLUSION

The time is right for the implementation of publicly-supported kindergartens in Saskatchewan. The interest of numerous groups in early childhood education, the concern of parents for the education of their pre-school children and the recognized importance of early learning experiences provide the necessary justification for public support of kindergartens.

The implementation of kindergartens will not be an easy task in many school systems. Operational implications will need to be carefully considered to determine the type of program which will best suit the needs of each jurisdiction. However, the Minister's Committee on Kindergarten Education believes that the value of taking such a bold step justifies the additional efforts which will be required to overcome the difficulties of the task.

We are convinced of the benefits of well planned kindergarten programs. We are also convinced that parents are prepared and anxious to support kindergartens in this province.

The challenge is ours. The opportunities are great. The time is right.

## Chapter 8

## SUMMARY OF RECOMMENDATIONS

The Minister's Committee on Kindergarten Education recommends:

1. That publicly-supported kindergartens be established in Saskatchewan.

2. That the decision to establish kindergarten in any school jurisdiction be a school board decision, rather than a provincial one.

3. That kindergarten teachers be certificated on the same basis as other teachers.

4. That because specialization in early childhood education is highly desirable, teacher education programs in the field of early childhood education be expanded and made more accessible.

5. That bursaries and scholarships be provided by school boards and the provincial government to assist kindergarten teachers and consultants in pursuing appropriate programs.

6. That the Department of Education establish a Kindergarten Curriculum Committee whose functions would include the development of a curriculum guide and a kindergarten teachers' resource handbook; and that there be lay representation on such a committee.

7. That kindergarten consultants be available to serve teachers, administrators and school boards in facilitating the implementation of kindergarten programs; and that the Department of Education assume major responsibility for the provision of

such consultative services.

8. That the Department of Education, through its representation on the Provincial Health, Education, Welfare Committee assume leadership in better coordinating the efforts of those agencies concerned with the diagnosis and remediation of learning-related disabilities in exceptional children.

9. That the Minister of Education continue to support the Provincial Health, Education, Welfare Committee and encourage the Committee to concern itself with all aspects of early childhood education programs, including teacher qualifications, program standards and the licensing of nursery schools and day-care centres.

10. That research in the field of early childhood education be undertaken, encouraged and supported by the Department of Education and all other agencies concerned with educational research in the province.

11. That school boards be encouraged, but not compelled to establish publicly-supported kindergarten programs in their jurisdiction.

12. That school boards planning to phase-in kindergarten programs should be provided with grant support to reflect the degree and type of implementation.

13. That entrance age for children attending kindergarten be a school board decision, with the understanding that only those youngsters who would be eligible to enter Division I the

following school year be included in the kindergarten program.

14. That Section 213 of The School Act be amended to read as follows:

"A school board may at the expense of the district make provision for the offering of instruction and training to children who have reached an age at which they may within one year be enrolled in grade 1 or Division I in the district."

15. That attendance at kindergarten should not be compulsory.

16. That existing legislation concerning compulsory school attendance remain unchanged.

17. That the length of the school day (half-day or full-day) and the number of days per week should be at the discretion of the school board.

18. That the length of the kindergarten term be the equivalent of 80 to 100 full days per year, with school boards determining the exact number of days, and the provincial grant formula reflecting this decision.

19. That the average number of pupils for kindergarten classes should be 20 - 25.

20. That in any class of more than 25 pupils a teacher aide should be employed to assist the teacher.

21. That when the number per class reaches 32, pupils should be divided into two classes.

22. That the minimum number of pupils needed to operate a separate kindergarten class should be 10.

23. That if there are fewer than 10 pupils they should be placed in the Year I classroom, and a teacher aide be employed to assist.

24. That where possible, the kindergarten classroom should be located within the school building.

25. That if the addition of a portable classroom is necessary, a class other than kindergarten should be located in the portable.

26. That the means by which kindergarten pupils are conveyed to and from school should be a local decision, with grant support being available for those jurisdictions conveying kindergarten pupils.

27. That teacher aides be employed to assist teachers in multi-grade classrooms serving kindergarten youngsters in order to facilitate a suitable program for all pupils.

28. That the computational mill rate in the grant formula not be increased beyond its present level for the purpose of implementing kindergartens.

29. That recognized expenditures in the grant formula be adjusted to reflect differences in in-school operational costs between school units and urban districts.

30. That in the grant formula, recognized expenditures per pupil for kindergarten pupils be set at 60 percent of the recognized expenditure for Division I and II pupils.

31. That provincial grants reflect the additional transportation costs to be incurred for the implementation of kindergartens in rural school jurisdictions.

32. That provincial grants be made available to cover capital building and equipment costs for the implementation of kindergartens.

33. That school boards be empowered to provide alternative kindergarten programs based on particular community needs.

34. That school boards be given authority to support private kindergarten programs, provided that no tuition fees are charged; that such programs meet Department of Education standards; and, that they are approved by the superintendent or Director of Education.

35. That the Department of Education initiate a number of pilot projects during the school year 1972-73 in order to provide information on the operation of kindergartens.

36. That the number of pilot projects, the exact nature of the projects and the school jurisdictions to be involved be left to the discretion of the Department of Education.

37. That the questionnaires designed for the cost study be used in order to project actual enrolments, capital costs and operational costs prior to the implementation of kindergarten programs in a specific jurisdiction.

Appendix A

REFERENCES PERTAINING TO THE LITERATURE


1. Almy, Millie C., Children's Experiences Prior to First Grade, Columbia University: Teachers' College, 1949.

2. Ames, L. B., "Children With Perceptual Problems May Lack Developmentally," Journal of Learning Disability, 4, (1969a), pp. 205-208.

3. Bereiter, C. and Engelmann, S., Teaching Disadvantaged Children in the Pre-School, Englewood Cliffs: Prentice-Hall, 1966.

4. Bergamini, Y. and Swanson, W., "Does Kindergarten Make a Difference?" School Executive, 74, December, 1954, pp. 54-55.

5. Berson, Minnie P. and Chase, William W., "Planning Pre-School Facilities," in Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, & Winston, 1968.

6. Bettelheim, Bruno, "How Much Can Man Change?" in Schreiber, C. (Ed.), Profile of the School Dropout, New York: Vintage Books, 1967, pp. 215-224.

7. Blair, Francis X., "Where Are We Going in Learning Disabilities?" Moose Jaw, Annual Conference, Saskatchewan Teachers' Federation Council of Exceptional Children, 1968.

8. Bloom, Benjamin J., Stability and Change in Human Characteristics, New York: John Wiley and Sons, 1964.

9. Brain, George, "Baltimore Early Admissions Project," Children, March-April, 1964.

10. British Columbia Department of Education, A Study of Kindergarten and Non-Kindergarten Children in the Primary Grades of School Districts 39 and 61, Victoria: The Department, 1959.

11. Bruner, Jerome, Toward a Theory of Instruction, New York, W.W. Norton and Company, 1968.

12. Caldwell, Bettye M., "What is the Optimal Learning Environment for the Young Child?" in Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, & Winston, 1968.

13. Caldwell, Bettye M., "A Timid Grant Grows Bolder," Saturday Review, 14, 8 (1971), pp. 47-49.

14. Calvert, D. R. "Dimensions of Family Involvement in Early Childhood Education," Exceptional Children, 37, 9 (1971) pp. 655-659.

15. Cameron, Donald R., "The Nature of the Learner and His Needs," An Address to Canadian National Conference on Retardation, Toronto, 1968.

16. Cameron, Gwendolyn W., "Relation of Selected Factors to Size of Kindergarten Groups." Unpublished Thesis, University of Utah, 1955, cited in Childhood Education, 43, 1, p.5.

17. Coffman, Alice O. and Dunlap, James M., "The Effects of Assessment and Personalized Programming on Subsequent Intellectual Development of Pre-kindergarten and Kindergarten Children. Final Report of Phase II.", July 1968, ERIC ED023487.

18. Cohen, Wilber J., "Next Steps for Children," Child Welfare, 48, 8 (October, 1968).

19. Commission on Emotional and Learning Disorders in Children, One Million Children, Toronto: Leonard Crainford, 1970.

20. Conway, C. B., "A Study of Public and Private Kindergarten and Non-Kindergarten Children in the Primary Grades," ERIC ED028837, January, 1968.

21. Datta, Lois-Ellen, "A Report on Evaluation Studies of Project Head Start," Paper Presented at American Psychological Association Convention, Washington, D.C., 1969.

22. Dawe, H. C., "A Study of the Effect of an Educational Program on Language Development and Retarded Mental Functions in Young Children," Journal of Experimental Education, 11,200 (1942).

23. DeHirsch, Katrina, et al, Predicting Reading Failure, New York: Harper & Row, 1966.

24. Deutsch, Martin, "Nursery Education: The Influence of Social Programming on Early Development," Journal of Nursery Education, 18,191, April, 1963.

25. Deutsch, Martin and Brown, B., "Social Influences in Negro-White Intelligence Differences," Journal of Social Differences, 20, 2, April, 1964, pp. 24-35.

26. Dey, Jean D., "Theory and Practice Governing the Time of School Entrance," Unpublished Thesis, University of Alberta, Edmonton, 1960.

27. Erikson, Erik H., Childhood and Society, New York: W. W. Norton and Company, 1963.

28. Fowler, William, "The Effect of Early Stimulation in the Emergence of Cognitive Processes," in Hess, Robert D. and Bear, Roberta M., Early Education, Chicago: Aldine Publishing Company, 1967.

29. Fraiberg, Selma H., The Magic Years, New York: Charles Scribner's Sons, 1959.

30. Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, & Winston, 1968.

31. Fuller, Elizabeth M., Values in Early Childhood Education, Washington, D.C.: National Education Association, 1960.

32. Fuller, Elizabeth M., "About the Kindergarten," What Research Says in the Teacher, Washington, D.C.: American Education Research Association, 1961.

33. Gesell, Arnold, The Mental Growth of the Pre-School Childhood, New York: The Macmillan Company, 1925.

34. Getzels, J. W., "Pre-School Education," in Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, and Winston, 1968.

35. Goldschmid, "Early Cognitive Development and Pre-School Education," International Journal of Early Childhood Education, 3, 1 (1971).

36. Gray, Susan W., "Selected Longitudinal Studies of Compensatory Education - A Look from the Inside," Paper Presented at Head Start National Conference, Washington, D.C., 1969.

37. Haley, et al, "A Comparison of Scores of Kindergarten and Non-Kindergarten Children in Specific Background Abilities at First-Grade Entrance," in Research in Reading at the Primary Level, Washington: Office of Health, Education, and Welfare, 1963.

38. Headley, Neith, The Kindergarten: Its Place in the Program of Education. New York: Centre for Applied Research in Education, 1965.

39. Honstead, Carole, "The Developmental Theory of Jean Piaget," in Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, & Winston, 1968.

40. Hunt, J. M., Intelligence and Experience, New York: Ronald Press, 1961.

41. Isaacs, Susan, Intellectual Growth in Young Children, New York: Harcourt, 1930.

42. Jersild, Arthur R., Child Psychology, New York: Prentice-Hall, 1954.

43. Kephert, N. C., The Slow Learner in the Classroom, Columbus: Charles Merrill, 1960.

44. Klein, Donald C., and Ross, Ann, "Kindergarten Entry: A Study of Role Transition," in Parod, Howard J. (Ed.) Crisis Intervention, New York: Family Service Association of America, 1965.

45. Klein, Jenny W., "Head Start: Intervention for What?" Educational Leadership, 29 (October 9, 1971), pp. 16-19.

46. Maier, Henry W., Three Theories of Child Development, New York: Harper and Row, 1965.

47. Markowsky, Doris, "An Evaluation of the Early Entrance Program in the Saskatoon Public Schools," Unpublished Thesis, University of Saskatchewan, Saskatoon, 1970.

48. McCandlas, Boyd, Children and Adolescents, New York: Holt, Rinehart, & Winston, 1961.

49. McConnell, Freeman, "Research Findings from a Language and Sensory Perceptual Training Program," April 1969, ERIC ED033835.

50. McHugh, L., "The Effectiveness of a Planned Kindergarten Curriculum on Primary Grade Achievement," in Research in Reading at the Primary Level, Washington: Office of Health, Education, and Welfare, 1963.

51. McLeod, J., "Psychological and Psycholinguistic Aspects of Severe Reading Disability in Children: Some Experimental Studies," Paper Presented to Third International Conference of the Association for Children with Learning Disabilities, Tulsa, 1966.

52. McLeod, J., Dyslexia Schedule, Cambridge, Mass.: Educator's Publishing Service, 1969.

53. Mindess, Mary and Keliher, Alice V., "Review of Research Related to the Advantages of Kindergarten," Childhood Education, 43, 9, May, 1967. pp. 505-512.

54. Mitchell, Mabel M., "Universal Education for Four-Year-Olds," in Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, and Winston, 1968, pp. 8-11.

55. Mukerji, Rose, "Early Childhood: Crucial Years for Learning," Childhood Education, 43, 1966.

56. National Education Association, Values in Early Childhood Education (2nd Edition), Washington: The Association, 1965.

57. National Institute for Mental Retardation, "Preliminary Draft of Report of Task Force on Pre-School and Home Care Programmes for Retarded Children," Toronto: The Institute, 1971.

58. Ohio University, "The Impact of Head Start: An Evaluation...", Athens, June 1969, ERIC ED036321.

59. Olsen, M. I., "The Development of Play Schools and Kindergartens and an Analysis of a Sampling of These Institutions in Alberta," Unpublished Thesis, University of Alberta, Edmonton, 1955.

60. Penfield, W. and Roberts, L., Speech and Brain Mechanisms, Princeton: Princeton University Press, 1959.

61. Pines, Maya, "A Child's Mind Is Shaped Before Age 2," Life, December 17, 1971.

62. Pitcher, Evelyn G., "An Evaluation of the Montessori Method in Schools for Young Children," in Frost, Joe L. (Ed.), Early Childhood Education Rediscovered, New York: Holt, Rinehart, & Winston, 1968.

63. Piwowar, Deanna G., "A Comparison of the Performance of Kindergarten and Non-Kindergarten Children on Selected Pre-reading Tests," Unpublished Thesis, University of Calgary, 1969.

64. Richman, Harold, "Educational Practices As Affected by Class Size," Unpublished Project, Teachers' College, Columbia University, Cited in Childhood Education, 43, 1, (September, 1966) p. 12.

65. Robinson, Halburt B. and Robinson, Nancy M., "The Problem of Timing in Pre-School Education," in Hess, Robert D. and Bear, Roberta M. (Eds.), Early Education, Chicago: Aldine Publishing Company, 1967.

66. Rosen, Carl L., "An Investigation of Perceptual Training and Reading Achievement in First Grade," May 1968, ERIC ED025400.

67. Roy, Irving and Roy, Muriel L., "Effect of a Kindergarten Program of Perceptual Training Upon the Later Development of Reading Skills." Final Report, October 1968, ERIC ED030491.

68. Royder, Nicholas F., "Preliminary Analysis on Kindergarten and First Grade Follow Through Test Results for 1968-69," 1970, ERIC ED045202.

69. Safran, Carl, "A Study of the Value of Kindergarten Training in the Calgary School System," Calgary Public School Board Report, 1953.

70. Sheperd, G., "The Early Education of Handicapped Children," Focus on Exceptional Children, 3, 1, pp. 1-10.

71. Silerberg, Norman E., "The Effects of Kindergarten Instruction in Alphabet and Numbers on First Grade Reading." Final Report, September 1968, ERIC ED025399.

72. Skeels, H. M., "Effects of Adoption on Children From Institutions," and Skeels, H. M. and Dye, H. B., "A Study of the Effects of Differential Stimulation on Mentally Retarded Children," quoted in Fowler, William, "The Effect of Early Stimulation in the Emergence of Cognitive Processes," in Hess, Robert D. and Bear, Roberta M., Early Education, Chicago: Aldine Publishing Company, 1967, pp. 9-36.

73. Sonquist, Hanne D. and Kamii, Constance K., "Applying Some Piagetian Concepts in the Classroom for the Disadvantaged," Young Children, 22, pp. 231-246.

74. Stone, L. J. and Church, J., Childhood and Adolescence, New York: Random House, 1957.

75. Strickland, Ruther G., "The Language Arts in the Kindergarten," Toward Better Kindergartens, Washington: Association for Childhood Education International, 1965.

76. Strodtbeck, Fred L., The Reading Readiness Nursery: Short-Term Social Intervention Technique, University of Chicago, 1963.

77. Swift, Joan, "Effects of Early Group Experience: The Nursery School and Day Nursery," in Review of Child Development Research, New York: Russell Sage Foundation, 1964.

78. Turner, Robert V. and DeFord, Edward F., "Follow-Up Study of Pupils with Differing Pre-School Experiences," March 1970, ERIC ED042810.

79. United States Department of Health Education and Welfare, "Breakthrough in Early Education of Handicapped Children," American Education, January-February, 1970.

80. University of North Colorado, "The New Nursery School Research Project . . . Final Report," Greeley, September 1969, ERIC ED042518.

81. Van De Riet, Vernon and Van De Riet, Hani, "A Follow-Up Evaluation . . . Program on Culturally Deprived Children. Final Report," December 1969, ERIC ED042516 and "A Sequential Approach to Early Childhood and Elementary Education. Phase I. Grant Report," 1969. ERIC ED042517.

82. Wann, Kenneth, et al, Fostering Intellectual Development in Young Children, New York: Columbia University, Teachers' College, 1962.

83. Weikart, David P., "Longitudinal Results of the Ypsilanti Perry Pre-School Project. Final Report VII," August 1970, ERIC ED044536.

84. Wolfensberger, W., Address to Saskatchewan Association for the Mentally Retarded, Saskatoon, 1971.

85. Worth, Walter H., Before Six, Edmonton, Alberta School Trustees' Association, 1966.

Appendix B

LIST OF INDIVIDUALS AND ORGANIZATIONS

WHO SUBMITTED BRIEFS TO THE COMMITTEE

Individuals

Mrs. Joan Bell - Prince Albert

Mrs. Vera Cushing - Swift Current

Mrs. Maria Fischer - Saskatoon

Mrs. Shirley Green - Saskatoon

Mrs. Angeline Hesje - Melfort

Mr. Jan Holterman - Quinton

Mr. Norval Horner - Rosetown

Mrs. Geeta Lall - Regina

Mrs. Dorothy LaPaire - Swift Current

Rev. & Mrs. John Moor - Luseland

Mrs. Marg. Parker - Melfort

Mr. Donald Purich - Prince Albert

Mrs. J. Stang - Wilkie-Unity

Mr. Gary Wouters - Saskatoon

Mrs. Isabell Wright - Melfort

Ms. Jeanette Zollner - Maple Creek

Organizations

Allan Kindergarten

Assiniboia School Unit

L'Association Canadienne Francaise de Regina

Balgonie Area - Mothers and Teachers

Battleford Central Parent Teachers Association

Borderland School Unit

Buchanan Local School Board

Canadian Federation of University Women - Moose Jaw

Canadian Federation of University Women - Swift Current

Canadian Federation of University Women - Yorkton

Canadian Home and School Association and Parent-Teacher Federation

Canwood Home and School Association

Caroline Robins Home and School Association - Saskatoon

Caroline Robins Public School Association - Saskatoon

Central Butte Kindergarten Committee

Central Butte School Board

Clavet Kindergarten Association

College of Education, University of Saskatchewan - Saskatoon

Cutknife Kindergarten Club

Davidson School Unit

Early Childhood Education Council - Estevan

Early Childhood Education Council - North Battleford

Eatonia Kindergarten Committee

Educational Psychologist, Provincial And Regional

Estevan Parents' Committee

Estevan Public School District

Estevan School Unit

Eyebrow-Tugaske Central School Board

Faculty of Education, University of Saskatchewan - Regina

Govan Local School Board

Guidance and Special Education Section, Department of Education - Regina

Hafford Community

Hudson Bay School Unit - Joint Committee on Kindergarten

Hyas Home and School

Indian Head School Unit - Teachers

Institute of Child Guidance and Special Education - Saskatoon

Kinistino School Unit

Lloydminster Association for Mentally Retarded

Lloydminster R.C.S.S.D. and Lloydminster School Unit

Lumsden Co-operative Kindergarten

Lumsden-Interested Individuals

Maple Creek Kinette Club

Maple Creek School Unit Board

Marcelin Knights of Columbus

Melfort Public School Board

Melfort Superintendency Teachers' Association & Public School Staff

Montessori School of Regina

Moose Jaw Public School Board

Nipawin School Unit

Nokomis Parents

North Battleford Public School District

Outlook Kinette Club

Prince Albert Roman Catholic School Board

Prince Albert Chamber of Commerce

Prince Albert New Democratic Party

Prince Albert Public School District

Prince Albert School Unit

Quinton Home and School Association

Ranch Ehrlo Society

Raymore Home and School Association

Regina Board of Education

Regina Rural Health Region Board

Reynolds Central School Kindergarten - Pathlow

St. Vital School Staff

Saskatchewan Association for Children with Learning Disabilities

Saskatchewan Association for the Mentally Retarded

Saskatchewan Association of Social Workers

Saskatchewan Association of Supervisory Assistants

Saskatchewan Branch of Canadian Association of School Administrators

Saskatchewan Chamber of Commerce

Saskatchewan Federation of Labour

Saskatchewan NewStart

Saskatchewan School Trustees' Association

Saskatchewan Teachers' Federation

Saskatoon Board of Education

Saskatoon Separate School Board

Semans Parents

Senlac Mothers

Star City Central School Board

Strasbourg Community

Sturgis Kindergarten Committee

Swift Current Public School Board and St. Patrick's R.C.S.S.D.

Tisdale Home and School Association

Tisdale School Unit Primary Teachers

United Church of Canada, Saskatchewan Conference

Unity Public School, Composite High School and Separate School District

Vanguard Community

Wadena School Unit

Wapella Home and School Association

Weyburn Public School District and Weyburn R.C.S.S.D.

Weyburn School Unit

Whitewood Home and School Association

Wilkie Home and School, Kindergarten and Exceptional Children Associations

Wolseley Community

Yorkton Interagency Co-ordination Committee and Society for the Involvement of Good Neighbors

Yorkton Public School Board

Yorkton Separate School Board

Appendix C

A PROPOSAL FOR BURSARIES, SCHOLARSHIPS

AND IN-SERVICE TRAINING PROGRAMS

If we accept the premise that kindergarten teachers require specialized training in the field of early childhood education, it follows that a determined effort will be required to involve current teachers in retraining activities and to encourage prospective teachers to enrol in early childhood education programs. As long as the need to increase the number of qualified early childhood personnel in the province exists, efforts must be directed towards making appropriate programs as accessible as possible and providing financial incentives for those interested in participating.

Efforts to assist those involved with kindergarten programs should include at least three areas: the training of consultants to provide leadership in curriculum development and in-service education; the retraining of present teachers; and the provision of in-service programs. The pre-service training of kindergarten teachers is not an aspect of this proposal.

Bursaries and Scholarships

The Department of Education should make available 10 bursaries of $4000 each for suitable candidates to engage in graduate programs which would better enable them to provide consultative services to kindergarten teachers and conduct workshops and seminars dealing with early childhood education. A two-year service commitment following the completion of a graduate program should be ensured.

The Department of Education should make available 30 scholarships of $1500 each for teachers who require training in early childhood education prior to becoming kindergarten teachers. Such teachers

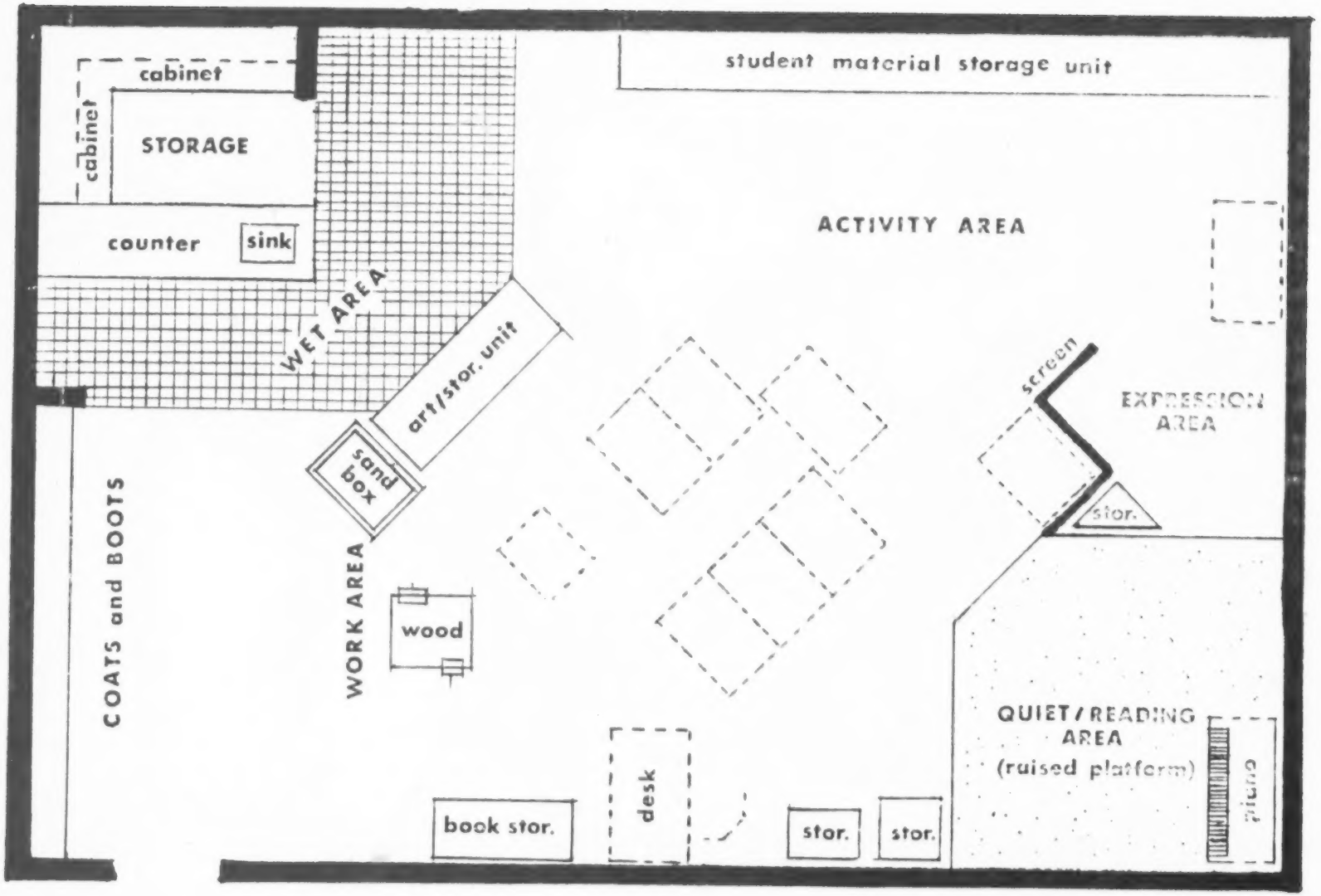
would be expected to return to the classroom for a minimum of two years.

School jurisdictions implementing kindergarten programs should offer summer school bursaries to teachers interested in improving their competencies as kindergarten teachers. Such bursaries would be distributed in accordance with the provisions of the area salary agreement.

In-Service Training

The provision of in-service training for kindergarten teachers should be a combined responsibility of the Department of Education, the Saskatchewan Teachers' Federation and school boards. The Department of Education should assume responsibility for providing the in-service training necessary for teachers to implement the program recommendations of the Kindergarten Curriculum Committee. Through its local associations, subject councils and provincial organization the Saskatchewan Teachers' Federation should be involved in providing co-ordination and other resources for in-service activities. School boards could contribute most effectively to this program by enabling teachers to attend workshops and seminars when these are held on school days.

window position not shown




# VARIATION of $S_S$ - BASIC UNIT $S_{Sr}$

DEPT. OF EDUCATION

24 x 36

MODE 6

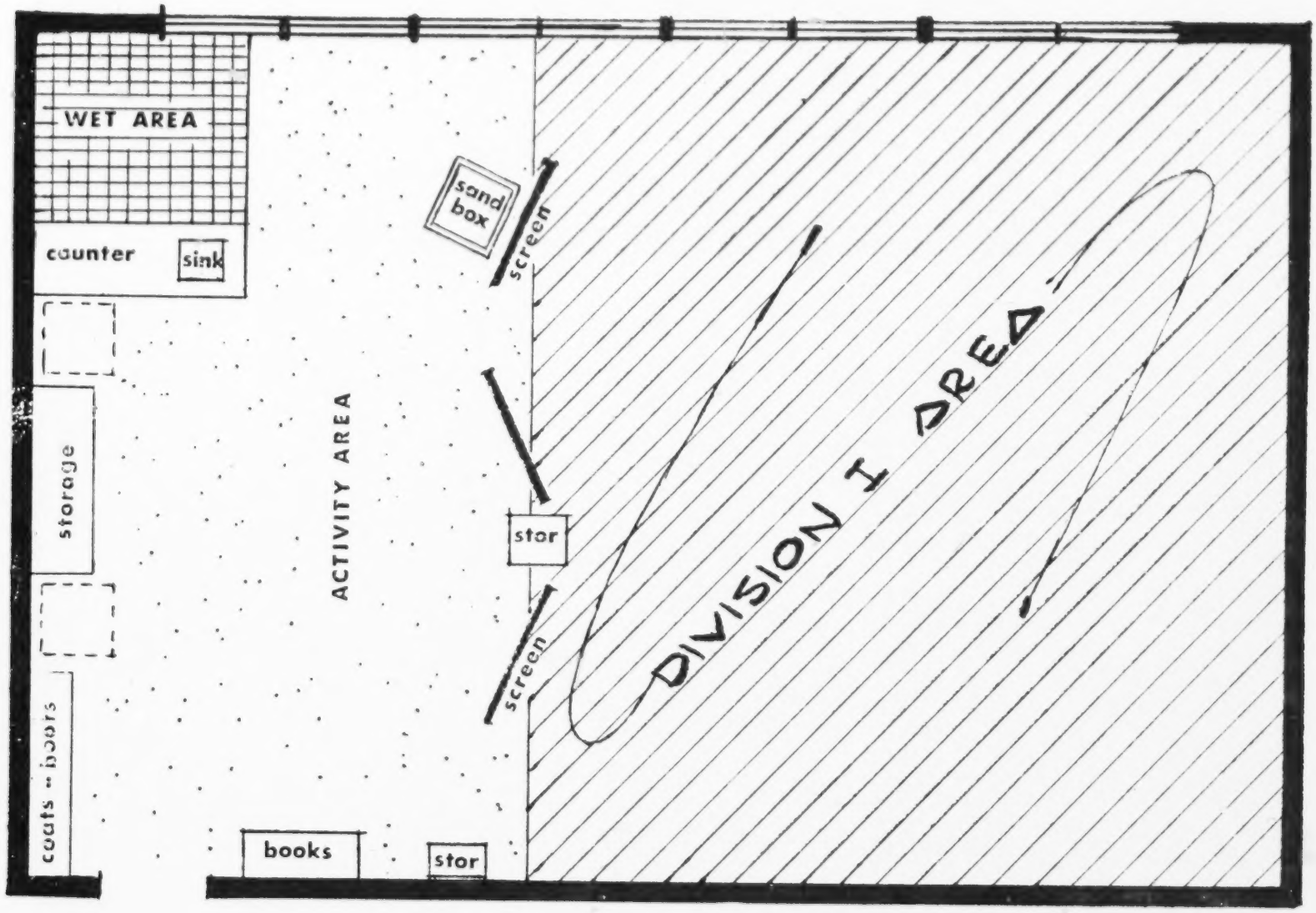
BASIC UNIT - Existing classroom space

| | | | |
|---|---|---|---|
| Area additions | $ 710 | (storage, coat rack, boot rack) | |
| Cabinets | 1,780 | | |
| Extra tackboard | 400 | | |
| | | | $2,890 |

CONNECTIONS

| | | |
|---|---|---|
| Sewer - For wet area (assume L @ 30') - 400 | | 400 |
| Total Cost | | $3,290 |

ADD: Location variable minus 20% of variable
Sewer connection variable




88

28

# ROOM INTEGRATION

DEPT. OF EDUCATION

24 x 36

COSTING FOR

ROOM INTEGRATION UNIT

MODE 6B - Classroom Integration

BASIC UNIT - Portion of existing classroom

Cabinets:

| | | |
|---|---|---|
| Screen dividers | $ 95 | |
| Wet area unit | 150 | |
| Storage unit | 150 | |
| Coats - boots | 100 | |
| Book storage | 130 | |
| Portable storage | 100 | |
| Sand box | 30 | $ 755 |

Renovation:

| | | |
|---|---|---|
| Sewer and water (assume L @ 30') | $400 | |
| Wall preparation | 145 | |
| Extra tackboard | 200 | 745 |
| TOTAL | | $1,500 |

Appendix E

RECOMMENDED EQUIPMENT

FOR KINDERGARTEN CLASSROOMS

The Curriculum Sub-Committee of the Minister's Committee on Kindergarten Education approved the list of basic items for program establishment indicated below.

It should be noted that equipment to which kindergarten pupils must have access for varied lengths of time, according to needs and interests, were not included (e.g. tape recorder, film projector). Furthermore, other essential equipment and materials were not itemized, since richer learning results when it is creatively and effectively provided by the parents, the community, the teacher and the child.

Only the basic equipment to be provided in each classroom is listed below. The complete equipment list, including ideas for improvisation, will be available to the Kindergarten Curriculum Committee.

To appeal to this age range, all equipment must be child size, accessible to the children, safe to use and attractively designed.

The following equipment is recommended for kindergarten classrooms with enrolments of 15 to 25 pupils:

I. Initial Equipment

| | | |
|---|---|---|
| 3 - | 36 inch tables @ $40.00 | $120.00 |
| 15 | Hollow block seats[1] @ $7.00 | 105.00 |
| 1 | set of 7" people | 15.00 |
| 1 | set of 5" people | 13.00 |
| 1 | aquarium c/w pump & light | 37.00 |
| 1 | animal cage | 12.00 |
| 1 | flower box | 6.00 |
| 1 | 4' x 8' peg board | 5.00 |
| 1 | box peg board pegs | 3.00 |

[1] Chairs have been omitted; these blocks will serve as construction equipment and chairs when necessary.

| | | |
|---|---|---|
| 1 | set Large Leggo Bricks | $ 14.00 |
| 10 | assorted felt pieces (9" x 12" colored) | 8.00 |
| 1 | plastic laundry tub | 5.00 |
| 1 | light hammer | 3.00 |
| 1 | box nails | .50 |
| 10 | balls @ .70 | 7.00 |
| 10 | hoops @ .85 | 8.50 |
| 10 | ropes @ .50 | 5.00 |
| 10 | bean bags @ .75 | 7.50 |
| | Climbing apparatus and Walking Board | 42.00 |
| | Saw Horse | 12.00 |
| | 4' plank | 8.00 |
| | 3 speed record player | 42.00 |
| 7 | records @ $1.50 | 10.50 |
| | Drum | 15.00 |
| | Miscellaneous | 15.00 |
| | | $542.00 |

II. Additional Program Establishment Costs

The Curriculum Sub-Committee indicated that $100 was also required to provide for additional program establishment needs. This would include the purchase of such items as:

A. Kindergarten Library Books
B. Teacher Resource Books
C. Teaching Equipment and Resource Equipment
D. Musical Equipment

The Sub-Committee recommended that the $100 be available for use at the discretion of the teacher.

III. Total Program Establishment Costs

| | |
|---|---|
| 1. Initial Equipment | $542.00 |
| 2. Additional Program | 100.00 |
| Establishment Costs | $642.00 |

## COSTING METHODOLOGY FOR LESS THAN FIFTEEN PUPILS

The following scaled costs were utilized as establishment costs for kindergarten classrooms with less than fifteen pupils:

| | | |
|---|---|---|
| 1. | Nine pupils or less (these pupils will be housed in an existing Division I classroom | $420.00 |
| 2. | Ten pupils | 607.00 |
| 3. | Eleven pupils | 614.00 |
| 4. | Twelve pupils | 621.00 |
| 5. | Thirteen pupils | 628.00 |
| 6. | Fourteen pupils | 635.00 |

The following program establishment equipment is recommended for combined classrooms:

| | | | | |
|---|---|---|---|---|
| 1 | 36" table | $ 40.00 | | |
| 9 | Hollow block chairs | 63.00 | | |
| 1 | set 7" people | 15.00 | | |
| 1 | set of 5" people | 13.00 | | |
| 1 | flower box | 6.00 | | |
| | 4' x 8' peg board | 5.00 | | |
| 1 | box peg board pegs | 3.00 | | |
| 10 | assorted felt pieces (12" x 9" colored) | 8.00 | | |
| 1 | plastic laundry tub | 5.00 | | |
| 1 | light- hammer | 3.00 | | |
| 1 | box nails | .50 | | |
| 9 | balls @ .70 | 7.30 | | |
| 9 | hoops @ .85 | 7.65 | | |
| 9 | ropes @ .50 | 4.50 | | |
| 9 | bean bags @ .75 | 6.75 | | |
| | Climbing apparatus and Walking board | 42.00 | | |
| | Saw horse | 12.00 | | |
| | Three speed record player | 42.00 | | |
| | 3 records | 4.30 | | |
| | Drum | 15.00 | | |
| | Total | | $320.00 | |
| | Additional Program Equipment Costs | | 100.00 | $420.00 |

Appendix F

SURVEY OF PRIVATE KINDERGARTENS

IN SASKATCHEWAN

During the spring of 1972 a survey of privately-operated kindergartens was carried out for the Committee through the cooperation of District Superintendents of Education. The purpose of the survey was to answer a number of questions concerning the nature, format and financing of such kindergartens. Data were obtained through the use of a questionnaire to all superintendents. They were asked to provide information on privately-operated kindergartens in their jurisdiction.

On the basis of returns, the following summary is provided:

1. In 1972, there were 261 privately-operated kindergartens in the province, involving 4,791 pupils.

2. The average tuition fee per pupil was $65.87; the total amount paid in private kindergarten tuition fees was $315,596. This did not include the costs associated with transportation; these were impossible to ascertain.

3. The average length of the kindergarten term was 6.62 months; and the average class size was 18.35 pupils.

4. Private kindergarten classes in cities generally had a longer term than non-city kindergartens, many of the latter being little more than short orientation sessions at the end of the school year. Almost 30 percent of rural programs operated for only two months.

5. Teachers of private kindergartens held a variety of certificates, with the majority being underqualified in comparison with

elementary school teachers. Only two of the 261 teachers were reported as having a Bachelor of Education degree, with 57 holding a Standard A Certificate (at least two years of training). Of private kindergarten teachers in cities; 30.88 percent had a Standard A certificate or better, with only 18.65 percent of non-city teachers having equivalent qualifications. Approximately ten percent of the teachers had no teaching certificate.